

A  
JUDGEMENT  
OF THE  
COMET.

Which became first  
GENERALLY VISIBLE

To US in  
DUBLIN

DECEMBER XIII.

About 15 Minutes before 5 in the Evening

ANNO DOM. 1680.

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By a Person of Quality.

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DUBLIN,  
Printed by *Joseph Ray*, for *William Winter*, and are to be sold  
by *John North*, *Samuel Hellsam*, *Joseph Howes*, and *William  
Norman*, Booksellers in *Dublin*, 1682.

A

JUDGEMENT

OF THE

COMET.

Which became first

GENERALLY VISIBLE

in 1793

DUBLIN

DECEMBER XIII

About 15 Minutes before 8 in the Evening

ANNO DOMINI

By J. T. O'Connell



Printed by J. O'Connell, at the University Press, and sold by J. O'Connell, at the University Press, and by J. O'Connell, at the University Press.

21

TO THE  
INCOMPARABLE  
SISTERS,

THE  
RIGHT HONORABLE

And Exemplarily

VERTUOUS

{HONOR Countess of ARGLAS.  
{ANN Viscountess BLESSINGTON.

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**W**Hat *Comets* are, the *Wiseſt Heads* admire,  
Though what they mean, is all the *moſt* enquire.

*Both ſorts* to ſatiſſie was ne're my thought :

Alas ! they're not *agreed yet* what to doubt.

But though to ſalve all Wonder I deſpair,

'Tis no preſumption to allay the fear.

You, *Noble Pair*, in whom concentred meet,

*Beauty* and *Vertue*, *Grace*, and *All that's ſweet*,

Pardon if this intituld to ſuch jars :

*Comets* take *Patronage* of *Brighteſt Stars*.



T H E  
C O N T E N T S

Of the following

D I S C O U R S E.

§. 1. **T**His Comet *very observable, as drawing all persons eyes, and, at this time, the Consideration of the most serious.*

2. *Three Questions about it. First, Whether it be an extraordinary one?*
3. *Comets, in general, not so extraordinary an occurrence as reputed.*
4. *A Table of Comets from before the Flood to this day.*
5. *The Table applied to the Question.*
6. *This Comet in particular proved no extraordinary one. Neither in*
7. *Colour.*
8. *Light.*
9. *Figure or shape.*



## The Contents.

- §. 10. *Time or season.*
11. *Motion or Course.*
12. *Attendants.*
13. *Change.*
14. *Distance.*
15. *Magnitude of Body or Train.*
16. *Or lastly in Duration.*
17. *An easie Hypothesis touching the production of Comets, proving them nothing supernatural.*
18. *Some obvious Objections answered.*
19. *The sum and Conclusion in answer to the first Question.*
20. *The second Question touching the significancy of Comets. The general Opinion in the Affirmative Presumptuous and Irrational.*
21. *The unreasonableness thereof shewed in General.*
22. *In Particular. First, Comets are not Natural Signs.*
23. *Nor are they Signs by Divine Institution.*
24. *A Table of most of the pretended Effects of Comets.*
25. *The intolerable and ridiculous uncertainty arising hence.*

## The Contents.

26. *The strictest Rules of the Prognosticators  
no whit mend the matter.*
27. *Instances setting forth this uncertainty.*
29. *The whole force of the Arguments on  
this point put together.*
30. *A particular Consideration of the reputed  
Comet over Jerusalem before its  
Destruction.*
31. *A particular Consideration of this Comet.  
The Prognostick Symptomes prove it not  
Formidable.*
32. *The third Question. What influence  
Comets should have on us? Their Ends.  
First, they repress Intellectual pride,  
and draw us into greater admiration of  
God and his Works.*
33. *They may be successfully applied against  
Atheism and Irreligion.*
34. *They are naturally enough Occasional  
Motives of New Devotions.*
35. *The Conclusion.*

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## ERRATA.

p Ag. 16 l. 31 after 40 Degrees put a comma. l. 32 for *Herelins* r. *Heruelins* p. 17. l. 28 for *had* r. *had* p. 42 l. 2. r. *with* p. 55. l. 11 for *prophefs* r. *profes* p. 54. for p. 43. 44. r. p. 38. 39.

TO THE HONOURABLE THE LORDS OF THE HOUSE OF COMMONS

A JUDGEMENT of the COMET,  
*which became first generally visible to us December 13. about 15 Minutes before Five in the Evening. A. D. 1680.*

**A**S to the present *Comet* (leaving its more exact Philosophical and Astronomical Theory to the Curious, who have advantages and leisure for it; and the Astrological judgment of it to those incurable Cheats and Cheated, the Admirers of that false named Science) I shall endeavour such account and resolution concerning it, as becomes a Rational person and considering Christian. I take it for granted that none, who pretend to this Character (whatever be the cause and *genesis* of *Comets* in general, can in the present *crisis* of Affairs, forbear thought sometimes of this: For as (supposing a man to be out of doors in a clear Evening while it appears) it will be seen of him, during its vigour, almost whether he will or no; so though to stand all amuzed and appall'd at it, be the part of great weakness, yet, as things go, not at all to heed it (and that too with serious reflections) may be deservedly censured, if not the height of Stupidity, yet a notorious degree of prophane Negligence and Confidence.

§ 1.

Three Questions are obvious to be moved touching it, which therefore my design will engage me to consider; What it has extraordinary? Of what import or significance it may be? and, What moral influence it ought to have upon its beholders?

§ 2.

But I am to be In

§ 3.

In satisfaction to the first of these I conceive, Comets in general to be no such extraordinary occurrence, as the common opinion and wonderment of people would represent them. They appear so frequently in one part of the World or other, that, if a perfect account could be made up, it would be manifest there seldom have passed or do pass many years together without some one or more of them. I have now in my hands a brief History of no less than One hundred ninety and odd, beginning with an old Tradition of One, in the year before *Noah's* Flood, and continued down to the Year of Our Lord 1596, Collected by one *Abraham Rockenbach*, Doctor of Laws, sometimes Professor of Mathematicks, and Dean of the Philosophical Colledge at *Frankfort*: to which Collection, notwithstanding (as copious as it seems to be) both during those years, it is not difficult to add some, and since them considerably more. So that if the matter be duly weighed, a Comet is no more rare a thing or object of wonder, than a very dry Summer or a severe Winter: and though both these deserve serious regard; yet I do not judge it becomes us to be ready to go out of our wits about them, or to think the State and Government, if not the World it self, is infallibly near a dissolution.

§ 4.

But it will be a most evident demonstration of the frequency of Comets and of the several intervals usually of their appearance (and, besides that, be very serviceable to what follows) if we set down as in a Table the several Years wherein Comets are recorded by Historians to have been seen, together with their place where they first appeared (if we can find it, in Heaven, if not, over what Countries?) the Time of such appearance, their Duration, Motion and Complexion: For all which, we must crave such allowance as the distance of time, the differences of Chronology, the nature of the matter, and indeed the repute of some Histories also do require.

# the COMET 1680.

3

| <i>An. Mundi.</i> | Place.  | Time.            | Duration.    | Motion.  | Complexion. |
|-------------------|---|------------------|--------------|----------|-------------|
| 1656              | <i>Pisces</i>   | <i>March</i>     | 1 Month      | 12 Signs |             |
| 1944              | <i>Capric.</i>  |                  | 65 Days      | 3 Signs  | Saturnine   |
| 2018              | <i>Aries</i>  |                  | 22 Days      |          |             |
| 2128              | <i>Leo</i>  |                  | 9 Days       |          |             |
| 2453              | <i>Capric.</i>  |                  |              |          | Fiery       |
| 2770              | <i>Gemini</i>   | <i>August</i>    |              |          |             |
| 2795              | <i>Aries</i>  |                  | 43 Nights    |          |             |
| 3458              | <i>A Comet in fashion of a Horn. Kigavrlas. Plin.</i> |                  |              |          |             |
| 3537              |   |                  | 75 Days      |          | Fiery       |
| 3553              | North-  | <i>Decem.</i>    |              |          |             |
|                   | wards   |                  |              |          |             |
| 3592              | <i>Orion.</i>   | <i>Midwinter</i> |              | From W.  | Southwards  |
| 3609              | <i>Leo</i>  |                  |              |          |             |
| 3624              | <i>Sagit.</i>   |                  | 19 Days      |          |             |
| 3743              | <i>Aries</i>  |                  | 22 Days      |          |             |
| 3767              | 2   | 1 <i>Capr.</i>   | some Days    |          |             |
|                   |   | 2 <i>Canc.</i>   | 19 Days      |          |             |
| 3769              |   |                  | 80 Days      |          |             |
| 3780              | <i>Pisces</i>   |                  | 82 Days      |          |             |
| 3789              | <i>Aries</i>  |                  | 32 Nights    |          |             |
| 3795              |   |                  | 55 Weeks     |          |             |
| 3798              |   | <i>Sept. 4</i>   |              |          |             |
| 3799              |   |                  |              |          | Fiery       |
| 3809              | <i>Taurus</i>   |                  | 9 Days       |          |             |
| 3819              | <i>Capric.</i>  |                  | 22 Days      |          |             |
| 3829 or 31        | <i>Gemini</i>   |                  | 83 Nights    |          |             |
| 3853              | <i>Cancer</i>   |                  | 15 Days      |          |             |
| 3879              | <i>Virgo</i>  |                  | 94 Nights    |          | Fiery       |
| 3903              |   |                  | 9 Days       |          |             |
| 3922              | <i>Scorpio</i>  |                  |              |          |             |
| 3935              | <i>Libra</i>  |                  | 95 Days      |          |             |
| 3940              | <i>Taurus</i>   |                  | several Days |          |             |

## A Judgement of

| Anno Dom. | Place. | Time.   | Duration.              | Motion.          | Complexion. |
|-----------|--------|---|------------------------|------------------|-------------|
| 1         | Leo    |   | 3 Nights               |                  | Fiery       |
| 12        | Aries  |   | 32 Days                |                  |             |
| 17        | Aries  |   | 20 Days                |                  |             |
| 40        | Gemini |   |                        |                  |             |
| 48        | Cancer |   | 4 Months               |                  |             |
| 56        |        | In Nero's Reign.                              | 6 Months               | From N. to E.    |             |
| 62        |        | In Nero's Reign                               |                        | South-Westwards. |             |
| 66        |        | In Nero's Reign.                              | Tacit. l. 15.          |                  |             |
| 70        | Gemini | Nero's Reign                                  |                        |                  |             |
| 71 or 2.  | Virgo  | April 8                                       | 1 Year                 | Immoveable       |             |
| 72        | Libra  |   | 40 Days                |                  |             |
| 77 or 8.  | Taurus |   |                        |                  |             |
| 81        |        | Titus Vespasian's Reign                       |                        |                  |             |
| 130       | Aquar. |   | 39 Nights              | 2 Signs          |             |
| 145       | Aquar. |   | 6 Nights               |                  |             |
| 188       |        |   | 1 Day                  |                  | Fiery       |
| 204       |        |   | many days              |                  |             |
| 220       | Pisces |   | 18 Days                | From W. to E.    |             |
| 308 or 6. |        | Immediately before                            | Constantine the Great. |                  |             |
| 324       | Virgo  |   |                        |                  |             |
| 340       | Aries  |   | 6 Months 3 Days        |                  |             |
| 367       |        | Seen in a clear day when                      | Julian was slain.      |                  |             |
| 370       | Aries  |   | 11 Weeks               |                  |             |
| 380       | Libra  | May   | 4 Months               |                  |             |
| 384       |        | A Comet in shape of a Pillar.                 |                        |                  |             |
| 389       | Gemini |   | 20 Days                |                  | Fiery       |
| 393       | Cancer |   | 40 Days                |                  |             |
| 394       | North. |   | 30 Days                |                  |             |
| 396       |        | About the time of the division of the Empire. |                        |                  |             |
| a. 400    |        |   |                        |                  | Fiery       |
| 412       | Leo    | Midsum.                                       | 4 Months               | 12 Signs         |             |

the COMET 1680.

5

| Anno Dom. | Place.                                 | Time.  | Duration.      | Motion.                    | Complexion. |
|-----------|--|--|----------------|----------------------------|-------------|
| 413       | Virgo                                  |  | 4 Months       |                            |             |
| 418       | Over Britain.                          |  | diverse Months |                            |             |
| 434       |  | A little before St. Augustines death.                      |                |                            |             |
| 448       |  | Many whole days together.                                  |                |                            |             |
| b. 451    | Over England & France.                 | Of very strange shape.                                     |                |                            |             |
| 454       |  | A Comet accompanied with strange apertures of the Heavens. |                |                            |             |
| 488       |  | A Comet of unusual shape and bigness.                      |                |                            |             |
| 539       | Sagitt.                                | Decemb.  |                |                            |             |
| 541       |  | Easter   |                |                            | Fiery       |
| 589       |  |  | 1 Month        |                            |             |
| 594       |  | January  | 1 Month        |                            |             |
| 597       | Constantinople.                        | Near about the birth of Mahomet.                           |                |                            |             |
| 601       |  |  | many days      |                            | Fiery       |
| 603       |  | Septem.  | 2 Months       |                            |             |
| 604 2     |  | 1. April   | 2 Months       |                            |             |
|           |  | 2. Nov.  | 2 Months       |                            |             |
| 617       |  |  | 1 Month        |                            | Fiery       |
| 633       |  |  | 30 Days        |                            |             |
| 677       |  | August   | 3 Months       |                            |             |
| c. 678    |  |  | 3 Months       |                            |             |
| 687       | Pleiades                               | Christm.   | 12 Days & day. |                            |             |
|           |  |  | Nights         |                            |             |
| d. 729 2  | Over Fr.                               | 1. Appeared before Sun rising.                             |                |                            |             |
|           |  | 2. Before Sun setting.                                     |                |                            |             |
| 745       | East                                   |  | 10 Days        |                            |             |
| 761 2     | 1 East                                 |  | 10 Days        |                            |             |
|           | 2 West                                 |  | 21 Days        |                            |             |
| 763       | East                                   |  |                |                            |             |
| 814       | A dreadful Comet, with Eclipse of Sun. |  |                |                            |             |
| 837 = 8   | Libra                                  |  |                |                            |             |
| 839       | Aries                                  |  |                | Diverse Fiery appearances. |             |

⚙ Sigibert. c Vid. Bed. Hyst. Ang. l. 4. c. 12. d Bed. Hyst. Angl. l. 5.

Anno



## A Judgement of

|    | Anno Dom. | Place.                                | Time.  | Duration.   | Motion.  | Complexion. |
|----|-----------|---------------------------------------|--|---|----------|-------------|
|    | 842       | <i>Aquar.</i>                         |  |   |          |             |
|    | 868       |                                       |  |   |          |             |
|    | 876       |                                       |  |   |          |             |
|    | 882       |                                       | <i>Jan.</i> 18                                   |   |          | Fiery       |
|    | 905       |                                       | <i>May</i>                                       |   |          |             |
| e. | 906       |                                       |  | 6 Months  |          |             |
|    | 910       |                                       |  |   |          | Fiery       |
|    | 941       | 2 <i>German.</i>                      |  | 1. 14 Nights<br>2. Uncertain                      |          |             |
|    | 944       | <i>Italy</i>                          | <i>Of an immense bigness.</i>                    |   |          |             |
|    | 968       |                                       | <i>The Year of the sixteenth Schism at Rome.</i> |   |          |             |
|    | 975       |                                       |  |   |          |             |
|    | 983       |                                       |  |   |          |             |
|    | 999       |                                       | <i>January</i>                                   |   |          | Fiery       |
|    | 1005      | South                                 | <i>Octob. 1.</i>                                 |   |          | Fiery       |
|    | 1043      |                                       | <i>Morn.</i>                                     |   |          | Fiery       |
|    | 1058      | <i>Poland</i>                         |  | diverse Days                                      |          |             |
|    | 1066      | All the                               | <i>Easter</i>                                    | 14 Nights   |          | Bloudy      |
|    |           | wor, over                             |  |   |          |             |
|    | 1097      | West                                  | <i>October</i>                                   | 8 Days  |          |             |
|    | 1098      | East                                  |  | 15 Days   |          |             |
| f. | 1105      | 3 <i>Sweden</i>                       |  |   |          |             |
|    | 1106      |                                       | <i>Febr. 2.</i>                                  | 6 Hours by day                                    |          |             |
|    | 1107      | East                                  |  | 40 Days   |          | Livid       |
|    | 1110      |                                       | <i>June</i>                                      |   | Very odd |             |
|    | 1115      |                                       |  | 6 Months  |          |             |
| g. | 1211      | <i>Russia</i>                         | <i>May</i>                                       | 18 Days   |          |             |
|    | 1214      | 2 Near N. Pole.                       |  | 1. Going before the Sun.<br>2. Following the Sun. |          |             |
| i. | 1223      | Over Fr.                              |  | 3 Months  |          |             |
|    | 1240      | Near N. Pole and its train Eastwards. |  |   |          |             |



the COMET 1680.

7.

| Anno Dom. | Place.    | Time.                    | Duration.      | Motion. | Complexion |
|-----------|-----------|--------------------------|----------------|---------|------------|
| 1241      | England   | January                  | 30 Days        |         |            |
| 1254      |           |                          | diverse Months |         |            |
| 1255      | England   |                          |                | Unusual |            |
| 1264      | Eastw.    |                          | 3 Months       |         |            |
| k. 1269   | Scotland  |                          |                |         |            |
| 1285      |           | A wast Comet this.       |                |         |            |
| 1298      |           |                          |                |         |            |
| l. 1299   |           |                          |                |         |            |
| 1300      |           | Year of Jubilee at Rome. |                |         |            |
| 1301      |           | Decemb.                  | 15 Nights      |         |            |
| 1304      | North     |                          | 3 Months       |         |            |
| 1305      |           | Passion week.            |                |         |            |
| 1313      | Near Mars |                          | 14 Days        |         |            |
| 1314      | Virgo     |                          | 3 Months       |         |            |
| 1337 1    |           | 1. May                   | 4 Months       |         |            |
|           |           | 2. June                  | 3 Months       |         |            |
| 1347      | Taurus    |                          | 2 Months       |         |            |
| 1352      | North     | Decemb.                  |                |         |            |
| 1363      | East      |                          | 3 Months       |         | Fiery      |
| 1375      |           |                          |                |         |            |
| 1380      | Aquar.    |                          | 3 Months       |         | Fiery      |
| 1382      |           |                          | 14 Days        |         |            |
| 1391      |           | In shape of a Spit.      |                |         |            |
| 1400      |           | Lent Sunday.             |                |         |            |
| 1401      |           | Februar.                 |                |         |            |
| 1402      | West      | March                    |                |         | Pale       |
| 1403      | East      |                          |                |         |            |
| 1433      |           |                          | 3 Months       |         |            |
| 1439      | Poland    |                          |                |         |            |
| 1444      |           | Summer solstice.         |                |         |            |
| 1456      | Cancer    | June                     | 1 Month        |         |            |
| 1457      | Pisces    | June                     | 1 Month        |         | Livid      |

k Magdeburg. Com 13. cap. 13. l. 11id.

Anno

| Anno Dom. | Place.          | Time.         | Duration.                      | Motion.              | Complexion.    |
|-----------|-----------------|---------------|--------------------------------|----------------------|----------------|
| 1458      | Taurus          | July          |                                |                      |                |
| 1460      |                 | Very dreadful |                                |                      |                |
| m. 1470   | Libra           | January       |                                | From ♄ to ♃          | Of colour like |
| 1472 2    | 1. Libra        | Jan. 13       | 6 Weeks                        | Extremely swift      | [Venus.]       |
|           | 2. Aries        |               |                                |                      |                |
| 1475      | Libra           |               |                                |                      |                |
| 1477      |                 |               |                                |                      | Saturnine.     |
| 1491      | Aries           | Spring        |                                |                      |                |
| 1492      |                 | Decem.        | 2 Months                       |                      |                |
| 1500      | Capric.         | April         | 18 Days                        |                      |                |
| 1504      |                 |               |                                |                      |                |
| 1506 2    | 1.              | April         | 5 Days                         | Perfectly Planetary. |                |
|           | 2. Leo          | August        |                                | 2 Signs              |                |
| 1511      | Leo             | May 30        | 33 Days                        |                      |                |
| 1515      |                 |               |                                | 12 Signs             | Lunar          |
| 1516      |                 |               | sever. days                    |                      |                |
| 1522      | West            |               |                                |                      | Saturnine      |
| 1523      |                 |               |                                |                      |                |
| 1527      |                 | August        | One hour and quarter at a time | several days.        |                |
| 1529 4    | In each         | Cardinal      | point one.                     |                      |                |
| 1530      | Cancer          | Aug. 6        | 3 Weeks                        | 3 Signs              |                |
| 1531      | Cancer          | Aug. 6        | 18 Days                        | 4 Signs              |                |
| 1532      | Libra           | Sept. 23      | 27 Days                        |                      |                |
| 1533      | Gemini          | June          | 2 Months                       | Retrograde           | 3 Signs        |
| 1537 2    | 1. West         | January       |                                |                      |                |
|           | 2. Taur.        | soon after    | 3 Weeks                        |                      |                |
| 1538      | Pisces          | January       |                                |                      |                |
| 1539      | Aries           | May 6         | 3 Weeks                        |                      | very pale      |
| 1541      |                 | Aug. 21       |                                |                      | Fierly         |
| 1542      | Constantinople. |               | 40 Days                        |                      |                |
| 1543      | Germany         | May 4.        |                                |                      |                |
| 1545      | West            |               | sever. days                    |                      | Sanguinous     |

the COMET 1680.

9

| Anno Dom. | Place.             | Time.      | Duration.      | Motion.   | Complexion. |
|-----------|--------------------|------------|----------------|---|-------------|
| 1554      |                    |            | sever.days     |   | Fiery       |
| n. 1556   | <i>Libra</i>       | March 5    | 52 Days        | Swift &   | Pale        |
| 1557      | <i>Sagittary</i>   | October    |                | various.  |             |
| 1558      | <i>Scorpio</i>     | August 6   | 18 Days        |   | very pale   |
| 1560      |                    | Decemb.    | 28 Days        |   |             |
| 1569      | <i>Capricorn</i>   | Nov. 9     |                |   |             |
| 1572      | <i>Taurus</i>      | October    | 14 Mont.       | Unmoveable.   |             |
| o. 1573   | <i>Cassiopeia</i>  | Novemb.    |                |   |             |
| 1577      | <i>Capricorn</i>   | Nov. 12    | 2 Monthas      | 2 Signs.  |             |
| 1578 3    | 1 <i>Southeast</i> | May 16     |                |   |             |
|           | 2, 3.              | foon after |                | Of short duration.  |             |
| 1580      |                    | October 9  | 8 Months       | 4 Signs.  |             |
| 1582      | Northwes.          | May 14     | 4 Days         | Northwards.   |             |
| 1585      | <i>Pisces</i>      | October 9  | 38 Days        | 4 Signs.  |             |
| 1593      | <i>Cancer</i>      | July 10    | 42 Days        | Retrogr. 3 Signs.   |             |
| 1596      | <i>Ursa maj.</i>   | July 9     | 25 Days        | To Leo  | Saturnine.  |
| p. 1597   |                    | July 16    |                |   |             |
| q. 1604   | <i>Sagittary</i>   |            |                |   |             |
| r. 1607   | <i>Ursa maj.</i>   | Sept. 25   | 31 Days        | Disappeared in Sagitt.  |             |
| s. 1618 4 | 1 <i>Ursa maj.</i> | Aug. 25    | 30 Days        | Disappeared in Cancer   |             |
| t.        | 2 <i>Hydra</i>     | Nov. 10    | 13 Days        |   |             |
| u.        | 3 <i>Perseus</i>   | Nov. 22    | 21 Days        |   |             |
| w.        | 4                  | Nov. 24    | 59 Days        | Disappeared in Cancer   |             |
| x. 1652   | <i>Gemini</i>      | Dec. 9     | 21 Days        | Disappeared in Taurus   |             |
| y. 1664   | <i>Gemini</i>      | Novemb.    | 3 Months       |   |             |
| z. 1665   | <i>Pegasus</i>     | Febr. 11   | diverse Months | Jovial.   |             |
|           |                    |            |                | "Questionable whether not more than one. Philos. Trans. p. 303. |             |
| a. 1677   | <i>Taurus</i>      | April 20   | 3 Days         |   |             |
| 1680      | <i>Capricorn</i>   | Dec. 13    |                | Jovial.   |             |

n Cardan. de rerum Varietas. l. 14. o Bodin. Theatr. Natur. l. 2. p Antonius Santorius.  
q Spondan. in Aularis ad Baron. Annal. r Kepler. & Longomontanus. s Kepler. t Idem.  
u Idem. w Idem. & Galilaeus. & omnia ferè Astronomicum coetaneis. x R. R. South Ward Presid.  
y Philosophical Transact. N. 1 & 2. z Philosoph. Transact. N. 3. 17. a Mr. Hook.

C

I shall

§ 5.

I shall make no further use of this Table, as to the point in hand, than only to infer thence, First, That if so vast a multitude of Comets have appeared since the Birth of our Saviour (namely One hundred eighty and eight in less than Seventeen hundred years) then 'tis not credible (Nature being not changed in its vigour or course by his coming) but that there were many more, in those 3947 Years of the World before his time, than through want of Records we are able to reckon up. Now if it may be admitted, that Comets were as frequent (proportionably to the time) before Christ, as they have been since, it will follow there have been near Six hundred of them already. But it is sure from the first setting out of the Host of Heaven, *Jupiter* has not yet finished his Revolution Five hundred times; nor *Saturn* his, near so much as Two hundred: Therefore, according to this account the appearance of Comets will be much less a rare occurrent in time, than these Planets running their natural stages.

However, Secondly, It being granted, as I see not how it can be denied, that they have been so numerous since Christ's time, they cannot now be reckoned of such prodigious note; seeing that that which comes to pass once in eight or nine Years (one with another) and sometimes once a year for divers years together, nay sometimes twice, thrice, or oftner in one year, cannot reasonably be looked upon as matter of wonder or astonishment. And if any shall discredit the account, and think it overcharged, such persons ought to be minded that since the Year 1664, viz. in sixteen Years we our selves, who are now alive, may remember four or five Comets to have appeared; that is more proportionably to the years, than is charged before. Yea I verily believe, as is observed by *Cardan*, there are very many which are not seen, and so entred into no Histories nor to be accounted; there being

being no reason why most of the Comets of which we are able to give account should have appeared either in the Evening or near the Morning, but that those are the times when Curious People watch for them, or rather that People are abroad: Whereas reckoning the multitude of Nights wherein the Heaven is clouded, or no considerative Observers out of doors all the dead time of the Night, no account is to be given what appearances have presented themselves in the Heavens all those seasons. Add hereto, that the accounts we have are only of such which are seen in the more civilized and better inhabited parts of the World; whereas undoubtedly Comets appear indifferently over Seas, Deserts, unknown and uninhabited Countries, as well as over the happier Regions. Generally then, Comets are no extraordinary occurrences.

Now that this particular Comet is no extraordinary one, much less, as some think, such the like to which never before appear'd, I shall not question to make as evident as any thing I have yet said.

§ 6.

Comets may be esteemed extraordinary, and so more dreadful, either from their Colour, Light, Figure, Season, Motion, Concomitants, Change, Distance, Bulk or Duration. As to each of these, I will assign instances of Comets most widely exceeding this.

The most dreadful colours Comets can be well conceived to appear in, I take to be the Black, or the Fiery Red. By those which the Astronomers call Black, I presume they mean such whose light is of a more Sullen, Saturnine, Leaden cast, inclined to Livid. And really methinks such are a kind of ghastly sight, and should bid as fair as any to be of fatal presage. Now of this hue have divers appear'd as may be seen in the Table, particularly

§ 7.

## A Judgement of

*Anno Dom.* 1107, 1457, 1477, &c. but how reasonably any black effects have been assigned to them we will see anon. In the mean time the *Fiery* or *Bloody Red* (of which Colour when Comets look, we are told they partake of *Mars*) is perhaps no less dreadful than the former, more indeed if we may credit the Poets, who still take this complexion to make up the Character of such, which they would have us believe to have been most formidable and dire.

*Virg. Æneid.*  
10.

—*Liquida quando nocte Cometæ  
Sanguinei lugubre rubent.*—

*When Bloody Comets in clear Night  
Glow with a deep and deadly Light.*

*Ad ann. Dom.*  
1066.

And of this first it is obvious to observe in the Table have appeared more, than of any other tincture. I will name only two of many, as a little more remarkable. In the Year of our Lord 1066 appeared one not only flaming but casting abroad Fires into the Sky. And that is recorded to have been of a deep bloody colour, which *Matthew* of *Westminster* tells us appeared in *England* (but indeed, as upon good authority I have set in the Table, all the World over in a manner) a little before the *Norman* Conquest. But this ours, when in the greatest pomp of terrour, resembled only the colour of a bright Moon, or, as some who saw it with the advantage of Glasses, liker *Jupiter*, that is more propitious.

- § 8. As to light, some have shone almost as strong and clear as the Sun: such was that which appeared in the year of our Lord 999. so dreadful, that people rose out of their beds, thinking their Houses had been on fire. That also, which was seen over *Babylon* at midnight, so bright that it was taken for the Sun it self, and the Course of Nature (of

(of Day and Night) a while thought inverted, *Sept.* 23. 1532. Did ours shine thus, we might indeed esteem it a Prodigy.

The Form or Shape of others has conciliated to them much dread. Astrologers affirm those in the figure of a Spit (sharp, slender and of indifferent length) to be most mischievous in their effects. Of this sort have many appeared, and the Artists tell us, saith my Author, their Events are slow but sad. I omit that of 1558. and look back to 1391. as more remarkable in its operations: For about a year after *Bajazet* sat down before *Constantinople*, (lesser accidents we'll take no notice of) and after seven years the Siege was raised, and he being taken by *Tamerlain*, was put into an Iron Cage, and carried so in triumph through *Asia*. Had he been trussed and roasted, the Prediction had had some shadow of Analogy. But these kind of Prophets are to be excused upon those important considerations of their own *dignity*, and the *worlds being unworthy* of them. We ought to understand Common people are not fit to foreknow, and 'tis below these Gentlemen to foretel (that is to particularize) any Event, till it is come to pass. For if people seeing a Spit, were at the same time told they were to understand it a Cage, they are so dull, it would not be beaten into their heads. But there being commonly (and very wisely) some half a score years (or such other number as occasion shall serve) betwixt the first (inform) Intimation, and the mature (formed) Prophecy, (which by another name we call the Event) if in such tract of time, all things under the Sun being subject to change, some little variation between the Prediction and its Complement should betide, what power on Earth can help it? And as to this, how little was it? Can any man alive say that in eight or nine years (the time demanded *ex post facto* to intervene between the Comet and *Bajazets* fall) a Spit might not be forged in-

to

§9.



to Grates? Well then, the fiery Spit did signifie *Bajazets* cold Iron Houfe, and they are ignorant Fools that deny it. 'Twas as fair a Judgment as any Son of Art need to make of a Comet. But to return from this digression: Ordinary people would look upon flaming Swords, or burning Javelins, and fuch like instruments of slaughter, as more dreadful shapes than Spits: but these we are told are a very common species of Comets, known therefore by the trite names of *Xiphie* and *Acontie*, &c. in Physiologists; wherefore we'll pass them. Only because I perceive the form of the present Comet much amuses, I should be wanting to my design, if I should not give account of some of more dreadful shapes than this we see, or indeed than any yet related, which notwithstanding did not determine the Worlds days, nor subvert the several Kingdoms in which they appeared. And first, what shall we think of that celebrated by *Pliny* and diverse other of the Antients, of so long time ago, that it is the fifth Comet we have any account of, which appeared in the form of a Fire infolding it self like a Serpent, whose vast glowing head wrapt it self round inwards towards its tail, named by the King of *Egypt* (from a Tyrant his Predecessor there) *Typhon*? *Anno Mundi* 2453. Yet notwithstanding this, the World has stood above three thousand years since. Again in the year of our Lord 451. over the Island of *Great Britain* was seen a Star of a wonderful bigness, to the train of which hung a fiery Sword not unlike a Dragon (we'll suppose it a lusty Fauchion) and as out of the Dragons mouth issued two vast Raies, whereof one reached as far as *France*, the other extending it self towards *Ireland* divided into seven lesser Raies, This is not so dreadful as that which follows: In the year 1527. about 4 in the morning, not only in the Palatine of *Rhein*, but almost all over *Europe*, presented it self for an hour and quarter blazing every day a most horrible Comet in this sort.

It

*Plin. Nat. Hist.*  
l. 3. c. 25.

*Sigebert ad A.*  
D. 451.

*Rossemb. Exem.*  
Comet ar.



It rose due East, and went on aloft to the Meridian, being still the more conspicuous as it run nearer North, setting in the West. The length [I suppose of its Train] was immense, of a bloody colour, inclining to a saffron. From the top of its Train appeared a bended arm, in the hand whereof was an huge Sword in the instant posture of striking. At the point of the Sword was one Star, at each edge of it one other, but that at the point the biggest of the three. From these Stars proceeded dusky Raies, like an hairy Tail: on the side of them other Raies like Favelins, or lesser Swords, (Rapier blades we'll suppose) as imbrued in blood, between which appeared humane faces of the colour of blackish Clouds with rough hair and beards. All these moved with such terrible sparkling and brightness, that many Spectators swooned with fear. Such Comets as these may justly affright indeed, and I could produce half a dozen such relations out of creditable Authors; but I will add no more of Comets extraordinary by their shape and form, this being enough to prove the present not such.

The time or season in which a man would least expect a Comet is by day. Ours indeed is modest, and appears not till the Sun is sufficiently withdrawn: but some have been so bold as to face him; as that in *Augustus* his time, Senn. Nat. Que. l. 7. c. 17. when he entertained his people with royal Shews and Solemnities in honour of his Mother *Venus*; which yet was looked upon as very auspicious. But in the year 367. when *Julian* the Emperor was engaged in the War against the *Perfians*, in which he was slain, a Comet appeared in clear day, and this was accounted fatal not only to the Emperor, but to the Delphick Temple: for diverse Earthquakes (forsooth) being the Effects of that Comet, in one of them fell that Temple, and was never rebuilt. Again, in the year 687. on *Christmas* day appeared a dreadful Star near the *Pleiades*, and was seen night and day

§ 10.

day till the *Epiphany*, soon after one Pope died (*Benedict II.*) and (which was very wonderful) another came in his room (*John V.*) But the boldest Comet I have met with was that 1106. *Febr. 3.* which in appearance seemed not to be above a Cubits distance from the Sun. To conclude this point how prodigious soever Comets by day may seem to us, it would seem by *Cardan*, as he reports from the Seafaring *Spaniards*, that in *Brazil* and those parts they are not very infrequent continuing day and night. However then this is less marvellous than those.

*De rerum Varietat. l. 14. c. 69.*

§ 11.

By their Motion Comets may seem extraordinary, either for their *Swiftness*, or *unnatural Course*. For swift motion, it is delivered to us by an old Tradition, that a little before *Noahs* Flood a Comet run through the whole *Zodiack* in the space of one month. But this may seem fabulous, nor will I concern my self for its truth: that which follows I can relate on better credit. In the year 1472. *Jan. 13.* appeared a Comet in *Libra*, which run backwards through the *Zodiack*, at first indeed more slowly, after a while 40 degrees at length 120 degrees each day. Answerable hereto is that which *Herælius* talks of, which in two days time run through eight Signs; that is two thirds of the Heaven. Now I cannot believe the present Comet, at its swiftest rate, has moved, (I mean by its proper motion, which is North-Eastward, and in a greater circle or very neer it) above three degrees in 24 hours: and then the proportion of its motion (as to swiftness) to the motion of these last named, will be only as 3. to 120. that is a fortieth part.

*Bodin. Theatr. Nat. l. 2.*

*In Prodrom. Cometic.*

The Anomaly of Motion is generally observed very extravagant in Comets. Some have set out from the North and gone Eastward, as that *A. D. 48.* others have gone straight from West to North, as did that 1582. with a very swift motion. One, which *Matt. Westminster* records

rose

rose in the East, and when it was come near the mid-<sup>Ad A.D. 1110</sup> Heaven run straight back again. And whereas generally Comets imitate the motion of the Planets (by whom some will persuade us they are acted and governed) there have been, which have run through the Twelve Signes (*contra seriem*) retrograde, as did one, of which *Hevelius* gives the relation, in 48 days. But some have taken such wild vagaries, that except one were to try tricks or puzzle some pretender upon the Globes, it would be tedious to set them down. That of *March 8. 1556* run with a swift course to *Spica Virginis*, thence to the Greater, thence to the Lesser Bear; then back again to *Cepheus*, and so to *Saturn* then in *Aries*, and before *Easter-day* it was got before the Sun, and seen before his rising till the end of *April*. One, which took a stranger dance than this, may be seen in *Rockenb. Exempl. Comet An. Dom. 1580.* the relation whereof for brevity sake I omit: and say touching the motion of the present Comet, that if there were any thing wonderful in it, 'twould be so much constancy, and proceeding as it begun, or so far holding on its first course. Of those which have been without any motion at all, and stood as it were fixt in the place where they first appeared, of which sort *Epigenes* in *Seneca* reckons all to be (*qui ardorem undique effundunt*) which emit light all about, and where-<sup>Nat. Qu. l. 7.</sup> of diverse may be observed in the Table, I shall say nothing, being that this of ours had motion true enough, and cannot therefore be thought wonderful for want of it.

We are then next to view those, whose attendant have rendred them formidable. Dismal are the pretences of the Star-prophets, when Comets appear at the

D

time

§ 12.

time of some considerable Eclipse. That in the Year 1477 in a very short time had for its retinue no less than four Eclipses; yet was not at all so wonderful in my opinion as that *A. M.* 3795, which appear'd with the pomp of three Suns. Sometimes they have Earthquakes as well as Eclipses attending them, as that *A. D.* 814. at other times Fire falling from Heaven and divers fiery Meteors or Impressions in shape of Spears, Swords, Dragons, &c. of which a multitude might be reckoned up, particularly those in the Years 1352, 1523, 1543, 1545, &c. but I forbear. Ours we are sure has no such dreadful state. I have heard indeed, that on *December* 23. which was ten days after I saw the present Comet, a great Meteor was seen to shoot violently from East to West about six in the Morning, and to leave behind for neer two thirds of a Quadrant a long train of light, which lasted neer a quarter of an hour. I confess I suspect a little this duration of its track, but otherwise conceive the appearance to have been only a copious exhalation or true Meteor. For such trains or tracks of light (of small continuance) are not unusual upon the fall of the body of the exhalation. The Prince of Poets, who does not use to fail in his descriptions, more than once thus represents them.

*Georg. l. 2.*

————— *Stellas* —————

*Præcipites Cælo labi, noctisq; per umbras  
Flammæ longos à tergo albescere tractus.*

*When Stars through Heaven shoot in shade of night,  
They leave behind them glaring streams of light.*

And

And again,

— *Tum longe limite sulcus*  
*Dat lucem & latè circum loca sulphure fumant.*

*Æneid, 2.*

*Through a vast track a lightsome furrow gleams,*  
*And all the Coast about with Sulphur steams.*

This then my old Friend will not suffer me to esteem  
 any thing extraordinary. But I must contract.

Some Comets have strangely altered their shape and  
 thereby encreased terror. That of the year 3609, which  
 preceded the conflagration of *Diana's Temple at Ephe-*  
*sus*, appeared first with a bushy beard, then turn'd in-  
 to a burning Spear. Ours has been still like it self  
 (only the top of its train a while, as 'twere a little  
 rounded on one side) till languishing by degrees, and  
 herein suffering the common fate of all things, it seems  
 to be upon its departure.

§ 13.

As to distance from us, those I conceive most terrible  
 which hang in the neighbouring air, I mean which are  
 neer us. Indeed these rather seem Comets than are  
 such. I will not therefore deny but some of these  
 have been and may be extraordinary works, or mes-  
 sengers of God. And such take I that to have been  
 over *Jerusalem* the year before its final destruction in  
 the likeness of a flaming Sword. But I am very well  
 assured this was far enough from us, and above the  
 Moon considerably.

§ 14.

*A. D. 72, vol*

*70.*

The main point which will stick with us is its ex-  
 tent or bulk. Now in making due estimate of the size  
 of Comets, regard (in my judgment) ought to be

§ 15.

D 2

had

## A Judgement of

had more to the body than to the train. I find, *May* 4. 1543. one to have appear'd, which looked in the Heavens bigger than a great Millstone. And *A. M.* 3819. a little before *Scipio's* taking *Carthage*, there was one for Magnitude and Globar figure like the Sun. *Seneca* expressly says it was no less. But if any think, that for want of later Mathematical improvements these relations are uncertain, let us hear *Hevelius*, who assures us, that by exquisite instruments and rules he took the magnitude of the late Comet, *Decemb.* 1664. and found its true Diameter to be 2560 *German* miles (that is about 7680 of ours) by which computation it must have been three times bigger than the Earth, and almost six times bigger than the Moon. I want Instruments to do as much for this: but as far as I can learn from those who have them, or my self guess by my naked eye, this is one of the least that, has been seen, except haply that of 1677. according to the report of some who saw it.

Yet herein, will some say, lies the Prodigy, that from so small a body should proceed so vast a train. To which I must take the liberty to return, that it is a great mistake to account the luminous tail of Comets to be due to the light in, or of their bodies: and I shall presently shew, that both the light of the body and train issues from the Sun. Mean-while, I am only concern'd to give some instances which may evince the train of this Comet not to be of such unparallel'd magnitude as is thought. In the year of our Lord 400. (according to *Baronius's* computation) before the irruption of *Gainas* the *Goth* into the Empire, appear'd a Comet, whose tail being downwards, reached from the body almost to the earth. That of 601 is said to have extended its raies through the far greatest part

*Nat. Qu.* 17.  
c. 15.

*In prodrom.*  
*Cometic.*  
*Fid. Philof.*  
*Wans. N. 6.*

*Strumen.*  
l. 2. c. 4.

*Magdeb.*  
*Cent. 6. c. 13.*



of the visible Heaven. A third in 677 from East to the very setting of the Sun. That of 1363 (*terribili suo ardore & flammâ dimidium fere cæli occupavit*) seized almost the whole Hemisphere with its dreadful heat and flame. The tail of another in June 1456 took up two whole signs of the Zodiack, that is one sixth of the Circle of the whole Heavens. I read in *Seneca* of one whose train was esteemed in appearance as big as the whole *Galaxy*. If those be not, *Hevelius* his account will be judged accurate, who tells of the trains of divers, some 60, some 75, some 104 degrees long. I am well assured these two last out of *Hevelius*, and believe most of those others out of the other alledged Authors were considerably larger than this ever was; which if twice or thrice exceeding 50 degrees in length, at other times fell much short; and (not to mention here what great variation the different disposition of our *Atmosphere* or *Medium* through which we behold all appearances in Heaven, causes in the measures of all such appearances.) I conceive the breadth of no part of it was many minutes above two degrees at any time. Mr. *Flamsted* is reported at the Observatory by *Greenwich* to have adjudged it Dec. 21. (at six of the clock, 30 min.) no less than 70 degrees in length, and 2 degrees in breadth. Some of my Friends in *Dublin* December 23. 7 h. 30 min. took it to be 75 degrees in length: and this is the largest account I have heard of. At other times 25 degr. 30, 34, 40, 45, were its more usual size. This only I shall add, that on Decemb. 15. when it appeared largest here, and could not be less than 60 degrees or upwards, as was plain by tracing its train on the Globe, at that very time Mr. *Flamsted* affirms it at *London* but 45 degrees so that there is all the reason in the World for that conclusion of *Riccioli*,  
that.

that the *Tails of Comets*, not only to divers, but to the very self same observers, appear of different sizes, sometimes shorter, sometimes longer, yea even on the same nights: all which must be in a great measure imputed to refraction, and the varying thickness or thinness of the Air or *Medium* in that place, where we behold them. Now things which are thus various, casual and uncertain, what Man of Judgement will account prodigious?

§ 16.

Nothing then, in all the regards above treated of have we found extraordinary in this Comet, and least of all will its duration be found such. Its first appearance here was *December 13.* between Four and Five in the Evening, though at *London* it was seen on the 10th. by reason of the difference of Air and Weather in a great measure without doubt. I hear indeed a Comet was seen at *Rome November 18.* (of their stile I suppose) in the Morning near *Spica Virginis*, and at *Ghent* in *Flanders* the 22. after, about 4 h. 15 min. Morn. distant from *Spica* 14 degrees and a half, and from *Arcturus* 32 degr. But though I will easily admit that Comet to have been the same with ours, yet sure it could not operate with us (at least not be a Sign or Prodigy to us) till it appeared here. I persist therefore to date it here *December 13.* or thereabouts (for two or three days is not material in this regard.) And now I write this *January 17.* it seems to have as good as taken its leave: 'tis as much as I can do to perceive it with my naked Eye. I do verily believe, he would be no false Prophet, who should say it will disappear, as to us, under six weeks from the time it was first seen with us. Now though it is most certain *Pliny* was much mistaken in his resolving, that the shortest duration of Comets



mets was Seven days, and the longest Eighty (*Seneca*, who was at no considerable distance from him, allowing Six Months to be no extraordinary term; and the Table attests more) yet it is evident, that according to that so faulty account of *Plinyes*, our present Comet observes a very strict mediocrity, and so neither in this respect is any extraordinary one.

Nor will indeed any reasonable person entertain much more wonder either at Comets themselves, or at any of their accidents, than he does at other natural occurrences, if he will please to lay aside that account of the generation and substance of Comets, which seems only devised by *Aristotle* (contrary to the sense of the Antients, and of the best Astronomers that then had been) on purpose (as far as I can imagine) to amuse the World. Not concerning our selves therefore for that Hypothesis of his, let us hearken to a more easie one, and suppose, First, That there are many more Stars in Heaven than we either see or can find on Record; and indeed, that many of them are not ordinarily visible, as well by reason of the weakness or dimness of their own light, as also for that they are very commonly neer the Sun and as it were absorpt in his light, and lastly because perhaps their Accesses to us are more rare. This supposition, as far as it concerns Comets (the matter in hand) is not new, but was the Doctrine of many Antients. *Sunt qui hæc sydera perpetua esse credunt, subq; ambitu ire; sed non nisi relicta a sole cerni*, saith *Pliny*. Some conceive these Stars, which we call Comets, to be perpetual ones, and to move in their own proper course; but not becoming visible, save when at due removals from the Sun. And *Seneca* names *Artemidorus*, as being, amongst others.

§ 17.

Ubi supra.

Nat. Qu. l. 7.  
c. 13.

Ad Æneid 10

De Rev. vario-  
nat. Lib. I. c. I.

others, a strong assertor of this opinion. But *Servius* avouches the *Stoicks* more at large for it, and tells us, they reckon up above Thirty of these Stars, all whose Names and Effects one *Abienus* sung in Iambicks: a sad ditty therefore we must imagin it was. *Cardan* with a little alteration, and many other Moderns have taken it up. But if in the general it should be denied, *Galilæus* his *Syderius Nuncius*, and dayly experience by Telescopes are uncontrollable proofs of it.

Præfat. in  
Dioptric.

Secondly let these usuall latent Stars be supposed neither opake bodies, (as the Moon is thought,) nor yet so compact as those of strong and glorious light, but of a slighter, thinner, yet pellucid frame, apt to receive and reflect light, and yet to transmit it refracted through their bodies. This *Kepler* assures us he plainly saw by the help of his Optick Glasses.

De subtilit. ad  
adv. Cardan.  
Æneid. 79.

Lastly, if any imagin the *Æther*, or fine Air of the *Celestial* Orbs above the Moon, to be too thin a *Medium* for refracted raies to appear invisible to us, let it be supposed the several Stars (as our earth) have each their respective Atmospheres (in the vast compass of the Heavens there's room enough without doubt for them) and in those Atmospheres raies transmitted through their bodies from the Sun may be easily conceived visible. *Scaliger* tells us of an artificial representing the Tayl of a Comet by a Globe of Glass. Suppose it so placed before a light, that the Spectators beholding it from a convenient station, the raies of the light should appear darted into a dark room as it were embodied, what more like the Tayl of a Comet? This Experiment some present *Virtuosi* have improved by filling the Glass-Ball with Water, and so making the appearance stronger.

These

These things thus supposed (and because each has its evidence I might challenge to be granted) I say if at any time such obscure and thin Stars, as described, come forth into a meet Position to the Sun, they shall thence receive and reflect so much light as to make them visible; and the Solar raies, passing through their Bodies, shall make a Tail (visible by reason of and) in their Atmosphere opposite to the Sun; that is a Comet, and such an one as we now behold, is naturally produced.

I concern not my self touching the centers of these Stars Orbes, where to be assigned, nor touching the Nature and Laws of their motion. 'Tis enough to my purpose that they, as all the Planets, have their proper course and periodical revolution; and then if they keep and accomplish this, not only Comets may be naturally, but except Nature alter its course, Comets must be. Nor am I moved at all with *Ricciolus's* assertion, that from the Year 1618 to the Year in which he wrote 1650, (*i. e.*) for 32 Years) no Comet at all appeared in *Europe*: the answer is obvious; none was observed, and I have already given very probable reasons to evince, there happen many more Comets than are seen.

This Hypothesis serves as an easie solution of all Comets, whose train proceeds as from the Sun: and tho it is commonly affirmed by some Moderns, that there are none which cast a train towards the Sun, yet I must confess I have read of diverse such, tho at first with a little incredulity. One at hand I'll mention. In the Year 1211, in the Month *May* for Eighteen days, appear'd a Comet with its tail [*in Orientem solem obversa*] turn'd against the Rising Sun, tho I believe far enough from it. Now as I cannot reject the authority of all  
E those,

*Cromer. de  
Gest. Polon. l. 7.*

those, who have recorded such relations as these to us; so I am no farther prest hereby, than to suppose such Comets (if any there have been) to have appeared at great distance from the Sun, and to have shone only near about the depth of the night, and then it is but concluding of them (as *Cardan* does of Comets in general) that they are produced by the incidencies of the raies of diverse neighbouring Planets, or of other big Stars meeting, and as it were uniting force, upon such Cœlestial body as before supposed, which body by such reflected light becomes visible, and may have some short and faint train produced by the penetrating raies of those Stars, as the more ordinary Comets have from the Sun. And this may appear more palatable to some men; for that Monsieur *Auzout* confesses, he has seen some Comets at some times much brighter than they used to be at others, by reason of some Stars coming into their vicinity. So that, of all Comets of any usual figures we have an easie account (which I conceive I could enlarge without much difficulty to the solving most of the Questions I have heard put touching Comets, were that my design.) And as to those of more extraordinary or irregular shapes, I must ingenuously acknowledge I suspect many of the Relations to be in a great part fabulous, and abusive. Ages, which foisted in the most fantastical reports into their Religion, might easily admit some less obnoxious into History. But I would still be understood to allow for some Signes in Heaven, which have been called Comets, but were the more immediate works of God, and perhaps appearances of Angels at Gods direction, and for ends proposed to himself, of which more anon.

*Phil. Tr. N. 2.*

has been said yet, That Comets in general are Ordinary and Natural emergencies, that they happen much oftner perhaps than we hear of, and have no more wonder in them (in some regards haply left) than other products of Nature, and particularly that this Comet is very far from being an extraordinary one of its kind.

From what has been thus discours'd may appear, how vain those pretences are (which so much affright, indeed at present almost astonish many) of the import and signification of Comets, and especially of this. 'Tis indeed a general (but very presumptive) maxim, avowed frequently to be grounded on long and constant observations, that Comets never appear without dreadful consequents. Not only the Judicious Secretaries of the Stars, but Philosophers and Historians of all sorts are full of these suggestions. Even the great Polititian of Florence, as little belief as he is suspected to have had for Christianity, had a plenophery of faith for the effects of Comets. [*Ut ut se res habeat, experientia certe compertum habemus, talia signa sequi solere magnos aliquos motus.*] *Machiav. Disp. l. 1. c. 56.* However the case stands, 'tis found by experience, that some great commotions usually follow such Signs: (He might have said, with equal truth, usually go before them, for so certainly they do and will till the Temple of Janus shall be shut again, which he full well knew was much a rarer occurrence than Comets.) And from hence the Poets, whose province it is to magnifie whatsoever is thought, or may create, wonder, or else will yield plentiful scope for fancy and Invention, have highly advanced the Conceit. Not a Battel or a Plague, no nor the death of a Great Man can be sung, but the Heavens must look odly in some part or other. Dreadful appearances from above must usher in those on

## A Judgement of

Earth. 'Tis below the Dignity or Art of an Heroick Poet to omit any imaginable aggravatory of Horror.

*Lucan. Phars.  
fal. l. 1.*

— *Crinemque tremendi*

*Syderis & terris mutantem regna cometam.*

*Stars arm'd with Brush & Dread through Heavens range,  
And Comets boding Kings and Kingdoms change.*

And to omit more trite passages,

*Claudian de  
Rapt. Proserp.*

— *Non illum navita tuto,*

*Non impune vident populi, sed crine minaci  
Nunciat aut ratibus ventos aut urbibus hostes.*

*If Comet shine by Sea or Land  
Spectators still concerned stand:  
With bearded threatings it foreshows  
To Navies Storms, to Cities Foes.*

It were easie here to be copious: But let us consider the imagination like people who have a Religion, which should place us above the abuses of Superstition or senseless fears, at least who have yet some reason left, which neither prejudice and vulgar presumptions have mancipated, nor fine fancies bewitched.

§ 21.

We see God, out of his Infinite Wisdom in the make of the Humane Soul, has denied prescience to Man; and undoubtedly for most just reasons, and with most benign designs: perhaps as destructive to humane Society and all possible methods of governing Kingdoms or Nations, but certainly as inconsistent with Christian Religion, which above all things teacheth us to live by Faith, and depend upon his gracious conduct and counsel through all events and concerns.

In whatsoever estate therefore of the Church he has  
thought



thought fit to communicate, whether to any publick part of the World or to any particular Persons, any thing future of Concernment to them; he has either sent Prophets (Men immediately inspired) to foreshew his pleasure, or instituted Standing Oracles (such as were the Mercy Seat, the Urim and Thummim, and Ephod among the *Jews*) for such time as he thought them fit, that his Servants might consult him by them; and when they come thereto devoutly and piously disposed, if God saw it good for them, they received plain and categorical resolutions (such as became Gods gracious Wisdom) of what they so enquired.

But it is evident enough to all men of sound minds, that Prophets and Prophecies long since have ceased: and as to any Oracles ordained by God, they fell much before the Jewish State. Both indeed might be necessary in the Churches minority, and under that Oeconomy: but now the very first point of real Christianity (and which till we attain unto, we are Christians only in name, and not in good earnest) being an intire self-resignation to Gods good Will and Providence, be the events what they shall, (to which 'tis in a manner necessary that we know not the events before hand, otherwise the resignation is not so intire and Heroick) 'tis very improper there should be in this state of things any such Prophetical Provisions. We are now to be taught by rational, not prodigious and as it were compulsive, Topicks of Faith. Others Examples are to be our Admonitions: to which purpose God has left his Church amply provided with Records, able to make us wise unto salvation, and has Instituted an Order of men, whose business it is to inculcate these; and if we will not hear them, neither would we be gained by one *that should come from the dead*, much less will the appearance

pearance of a glaring Meteor (as Comets are ordinarily esteemed) effectually reform or bring us to repentance. As to the grand Futurities, such as the dissolution of the World, the Day of Judgment, the resurrection of the Body, &c. as far as it is needful for us to know them, they are set down in Scripture: and as to lesser and more particular ones, besides what has been said of resigning all to God, and being ready for whatever comes, we are taught, in the management of our affairs here, to implore wisdom from God, to use our own prudence, the advice of fit and able friends (*Prudentia est quædam Divinatio.*) In a word, God's good Guidance and Prudential foresight is, in particular events, all the Revelation we must expect, or which becomes the present state.

Cicero.

And the truth is, all other methods which beyond these men have sought or devised to themselves, for foreseeing or foretelling any occurrences, are so expressly forbidden by Scripture, that there is no person who is not blind with prejudice, but must acknowledge their unlawfulness or vanity. And particularly as to Astrology, I conceive this forbidden to us, chiefly for this very reason, that 'tis so uncertain and fallacious. God was gracious in the Prohibition, and would not have us labour in vain. I therefore declare, that I do and must, till I can see some solid grounds for the principles the Judicallists take up (even for their very Scheme of Houses,) look upon Judicial Astronomy as the impudentest, as well as the eldest, cheat in the World, of all that pretend to knowledge.

The suggestion that either it, or the Doctrine of the signification of Comets (which is its Sister, if not rather part of it) is founded, as surely as Medicine, upon experience, and long observation, is utterly false.

No



No more silly, barbarous, precarious Books on earth, than those, whence the Astrologers take their rules of Judgment. I can try, and find by my own body, that *Senna, Rhubarb, &c.* purge; that *Poppies, Opium, &c.* induce sleep or *Stupor*; and if I take them in due quantity, all my reason or will cannot hinder these effects in my body: but that such an Aspect of *Saturn* makes me dull or heavy; or if *Mars* inclines me to rage, anger or murder, I defy all the experience or sense in the World to prove. In a word, no principles can be conceived more gratuitous and fantastical than those which these men proceed upon, being indeed built all upon meer imaginations, and the dotings of crazed Brains, or else upon Diabolical cheats and Heathenism.

To be short, it can never, while the World stands, be made out, as to matter of fact, that such Events, pretended to be the Effects of particular Configurations of the Heavens, or of Comets, to which my discourse rather confines me, (though they, who write of Comets, tell us also their influences are various, according to the Signs they appear in, or according to the nature and Dominion of those Stars, whose signature they bear;) I say it can never be made out, that these have any more connexion with them, than that of Accidental Synchronism, and sometimes not that neither. Perhaps both have been in some places coincident in time: it cannot be proved they are generally and perpetually so. The Learned *Scaliger* putting the Question in this case, in his Exercitations against *Cardan*, whether Comets were signs or causes of futures? resolves (bluntly, but honestly) They are neither. But not to depend on Authorities to make this out, we will reduce the pretended significancy of Comets to its proper principles and causes.

*Cardan. de  
de Rer. varis-  
tat. l. 14. c. 70.*

*Exercit.  
79. § 2.*

If

§ 22.

If Comets at all prenote future Events, they must do it either in ordinary course of Nature and Efficiency, or by Divine Institution. I see not what third ground of their significancy can be assigned: except haply some should say, 'tis by fortune, and then I think a throw at Dice were as wise an Oracle.

As to any prophetick virtue of Comets deriveable from Nature, I think no more needs to be said, than to represent the state of the Case, as the most Learned and Rational Assertor, that I believe it ever had, drew it up. Hear therefore that great Scholar *Jerome Cardan*, whom *Scaliger* thought to be as neer the highest pitch of Learning as any man.

*De Rer. Var.*  
l. 1. c. 1.

*Cum ergo videtur, tenuem esse aerem in modicè necesse est, &c.* Whenever a Comet is seen the Air must needs be extremely thin, wherefore all the adjuncts and consequents of the Airs being thin must then combine and begin to operate. First of all therefore are generated Winds: for Water easily moves, because 'tis thinner than Earth, and Earth moves not because 'tis grosser; and Air moves more than Water, because 'tis thinner than Water; and in Air those parts that are thinnest, and in that constitution when they are thinnest move most.

Behold now an account of the first natural effect of Comets! And what shall we have next? Verily from extraordinary Winds I should have expected Shipwrack and so Breaking of Merchants, and decay of Trade as the consequents thereof; or else scattering of Navies and weakning of Commonwealths thereby; or lastly desolation of some Countries subject to Hurricans, &c. But if the death of Princes must needs follow this effect of Winds, I should have thought it would have come to pass by sudden ruins, because Lofty Palaces are more exposed to Violent Gusts than Humble Cottages: yet attend

attend both this event of the death of Princes in another method, and others too.

*Thence (says my Author) ensues the death of weak persons, who use no exercise, are thoughtful and distracted with many cares, who feed finely and on delicate meats, who indulge Venerial pleasures, and who are easily sick, and who incline to old age or sleep little.*

Why then one would imagine first, that young Martial Princes were secure from the effects of Comets (for this character of softness, age, &c. agrees not to them) and secondly that all Princes were safe enough from Violent ends, as far as predicted by Comets, for according to this doctrine the Ends of Princes, which Comets preface, must be in natural course and by Diseases. But whosoever shall examine our usual Cometographers, will find this to have been the effect of such and such a Comet, that this Great General was slain in a Battel, another Prince killed at home by Treachery, Poison, &c. Yet no such thing is the effect of effeminacy or weak constitution. But our Author proceeds, as if Princes ends prefaced by Comets had no connexion or dependence on other accidents.

*Because therefore (saith he) most Princes are so [In Italy we'll suppose] it most commonly happens, that some of them dye soon upon the appearance of Comets, Then follows usually a great Droughth, because the Air being thin, cannot retain those vapours, of which Rain is generated; and besides the aforementioned Winds dry much. Hence comes Dearth for want of Rain, and then a Plague or Pestilence, either by reason of the Droughth [we'll imagine too (to help out) because of the Dearth, for that then the common people must needs feed very foully whence corrupt humours must ensue, &c.] or because it falls into a Country much depopulated. For when Princes, or a great*

many dye, people take notice of it, (in the one for their Nobility, in the other for the multitude) and presently call it a Plague; whereas at the death of a few they are regardless: yet for the reasons above touched, (saies he) it must needs come to pass (yea if there were no Plague) that many such persons, as we have spoken of, de cease. Further, from hence it comes to pass that Seditions and Wars arise, the Humours being changed into Choler, by reason of the thinness of the Air: for whatever is thin is also dry.

*Risum teneatis Amici?* I should rather have expected Seditions, Combustions, Slaughters, Massacres, &c. from the death and change of Princes, than from the droughth of the season.

*In the end sometimes follow also immoderate Rains, because the thinness of the Air begets many vapours on the surface of the Earth: and as the Air grows thicker, when now many days they have been gathering together, they are carried up and become dreadful Clouds and Showrs. And then the danger of the Comet ceases, because the Air is returned to its former nature.*

This is all that this great Wit, after all his learning, was able to say for Comets being a Natural Sign: and the Web he has so curiously wove, is so thin, that it will not hold handling, much less need we further unravel it: Though it be very obvious to return hereto, what *Scaliger* has demonstrated, and what the Natural History of Comets ordinarily evinces, that neither are all Comets generated by or with droughth, nor do they induce or portend it. And so much *Cardan* well knew, (though haply he attended not to it) for he presently subjoins Comets, which take their being from the raies of Venus, bring great Rains, namely as their next and properest, not remotest effects. But even this conceit of some Comets being rainy, will be confuted presently, when

when we come to see the uncertainty of the matter of fact, that any of these effects have usually attended Comets, which could not be, were they Natural Signes: for whatsoever is natural is constant, at least generally certain.

Comets then having thus no natural significancy, as § 23. pretended, what they may admit by Divine appointment we are as yet to enquire immediately of God alone: for in his Word not one tittle to be found hereof, but rather the flat contrary. The Holy Ghost cannot well be more express in any thing, than it is to this purpose *Jerem. x. 2. Thus saith the Lord, learn not the way of the Heathen, and be not dismayed at the Signes of the Heavens, for the Heathen are dismayed at them: For the Customs.* [מִצְוָה the Precepts or Institutes, whether those rules they have delivered to prognosticate by, or the Prognostications & Positivities themselves] *are vain;* and it follows, *they only lead to Superstition or the fear of False Gods and Idolatry.* For though *Pliny* tells us no Lib. 21. Comet was ever worshipped in any part of the World, save one in a Temple at *Rome* by *Augustus* his Institution; yet this hinders nor, but the observation of them may be subservient to Idolatry, though themselves are not made Idols of. And upon their appearance, what recourse used to be made to the *Pulvinaria Deorum*, to Altars, Temples, Shrines and Images of the Gods amongst the Heathens, is known to all men of any reading, and would be too tedious a digression for me to engage into. Nay even amongst some Christians, what silly practices their (אֲדֻמְדָּמִים) truly Heathenish because superstitious fear has put them upon, what Charms, Aumlets, Talismanical Puppets, which are all of them but old Diabolical Cheats (however justified by some Men, whose Curiosities have infatuated them)

it is a shame to Christianity to set forth.

What can be said against the closeness and force of the above cited Text I am not able to imagin, except any should deny that by Signes there we are to understand such Apparitions, as are usually called Meteors, or any Aairy Prodigies, and interpret it only of the Signes of the Zodiack or of constant Constellations. On the contrary, the second time that the word is used in Scripture, 'tis applied to a Meteor, *Genes. ix. 12.* and it cannot be made out that it ever signifies in Scripture a Constellation; but that it does signifie Prodigious Signes the following places may evince, *viz. Exod. iv. 9. Numb. xiv. 11. Deut. iv. 34.* and again, Chap xxvii. 8, &c.

*Matth. 24.  
Luke 21.*

Touching what may be objected from the *Signes in the Heavens* foretold by our Lord to precede the Destruction of *Jerusalem*, I shall presently consider. Mean while if any pretend God has appointed the several Comets which appear for so many presages of his intended and instant Works, such Persons ought not only to shew us where God has exprest this his appointment, but also what *Rules* he has given in Scripture for finding out the meaning of these Signes; What they import, good or bad? When this, or that, to befall? And to whom? No one can *know* Gods *mind* (that is his meaning by these Signes) except he will *discover* it; *Discovery* of it he has given *none*, nor any *Rules* by which we may make such discovery; His Mind still, notwithstanding the pretended signification of it by these Signes, remains *secret*: so that in time, when we can find out the *secret* Will of God, we may *understand* the meaning of these *Signes*. Now would any wise man in the world ever appoint such a Sign, which should indeed signifie something, but *What* that, to  
Whom,



*Whom, Where the Event should fall, When, How or Why*, it were utterly impossible for any one to know, but himself, till he would tell them. This is to make the most Holy, Wise and Gracious God to call the world, or nations and people to Repentance by Oracles, like those of the Devil of *Delphos* [*Ὁ δὲ Διὸς ἱερεὺς, ὁ δὲ ἀπὸ τοῦ Διὸς λαλῶν*] and neither tell us his mind nor conceal it, but hint somewhat that no body knows what to make of.

In sum, if they cannot tell us some way to determine the signification of Comets, it were as good to say ingenuously, they foreshew nothing at all: for he tells me nothing in effect, that tells me nothing certain or determinate. This will be plain by instance. A Comet has appear'd, says some profound Sage (from long Observation we must suppose,) some strange new Event will shortly come to pass. Where, say I? Thereto he gravely answers, he cannot tell precisely, but it will be in *England, Scotland or Ireland*, or in *France, Spain, Germany, Italy, &c.* or in *Peru, Guiana*, or some of those parts of *America*, near which the Comet has pass'd vertically. Very good: but will that Event be New in kind, or only in Number? Will it be an Event of such nature the like to which never fell before? Scarce that; for thus *There is nothing new under the Sun*: Events like the world only circulate. But it will be one Event, which one was not before: that is, the World's not quite at an end yet in these parts; there is something Future. A pretty kind of Prediction indeed! and, as said, in Effect nothing.

But surely, will some urge, there is some way of coming neerer the mark than this. Yes, we'll try what can be done by force of Art and Observation, and see, if upon examination of the several imports of Comets we can gain better satisfaction. To this purpose let us collect



collect in the first place as full a *Table* of their *Effects* as we can: and if they be not some of them as *contrary* one to another, as can be well assigned, I am much mistaken.

Some Comets then are said to have produced (or portended, for all is now one to me)

- | by Some   | Others  |
|---|---|
| 1. High and durable Winds and Tempests.                                 | 1. Marvellous and long Calms.                                 |
| 2. Great Droughts.  | 2. Great Rains and Inundations.                               |
| 3. Violent and scalding heats.  | 3. Long Colds, and hard Winters, great Snows, violent Frosts. |
| 4. Unseasonable Weather.  | 4. Early Springs and good Weather.                            |
| 5. Great Dearth.  | 5. Marvellous plenty.   |
| 6. Deaths of Princes, or of other Great men.                            | 6. Birth and Succession of new ones.                          |
| 7. Pestilencies and malignant Distempers.                               |   |
| 8. Generation of various Monsters of men, beasts, &c.                   |   |
| 9. Multitudes of strange Insects, and of Ravenous beasts.               |   |
| 10. Earthquakes, and strange eruptions of Fire, as at <i>Ætna</i> , &c. |   |
| 11. Devastation of great Cities, or burning of them.                    |   |
| 12. Seditions, Treasons, Wars and great slaughter.                      |   |

- |   |                                     |
|---|-------------------------------------|
| 13. Subversion of Empires,<br>and change of Govern-<br>ment, Laws and Liberties.<br>14. Alterations in Religion.<br>15. Diverse strange Prodigies,<br>raining of Blood, Fire fall-<br>ing down from Heaven,<br>Parelly, &c. | 13. Strange rise of New<br>Empires. |
|---|-------------------------------------|

Lastly, suppose to those publick Calamities, 7, 8, 9, &c. to which no contrary is put in the opposite Columne, I should oppose the more propitious influences some Comets are reputed to have had, as that before mentioned in *Augustus's* time, that in the beginning of *Nero's* Reign, which *Seneca* saith took off the Ignominy from Comets, and another about the time of *Mithridates's* birth, &c. this yet would considerably add to the Variety. And verily this ought to be attended unto, for that according to the judgment of those very men who contend most for the influence (and so the significancy) of Comets, all Comets are determined or diversified as to their effects by the virtue of those Planets under whose Dominion they exist. Therefore, as has been argued by sundry judicious men, all *Jovial* or *Venerial* Comets should be good natured and auspicious, for such (forsooth) are the Planets that influence them. And as to matter of fact, *Gemma Erisus*, a great Mathematician, is reported to have made up, with great exactness, a Catalogue of as many good effects, that have followed upon Comets as of evil ones: nor can it be conceived otherwise for these two reasons. First, for that if we take a just account, Gods Mercies are not less, (perhaps more) numerous than his Judgments: at least he has (like some old

old Mosaick Works, which way soever you look on them) checquer'd the proceedings of his Providence; so that as the old *Tragedian* sings,

*Euripid.*

Οὐκ ἄν, γίγνεται καὶ ἰσθλὸς καὶ κακὸς,

Ἄλλ' ἱστῶνται μίσην καὶ ἔχοντες χάριν.

*Evills and Goods never asunder stood,  
'Tis a kind temper of both we call Good.*

And again those very events, which are some mens mischiefs, are others goods, and perhaps more eminently and generally so. Thus the Comet, of which some interpreted to presage *Luther's* preaching against Indulgences and the Reformation consequent, bespoke evil it may be to his Holinesses Kitchen (though those, who come from abroad do not speak great things of his Hospitality) but if so, it was certainly as the dawning of a Blessed and Salvifick Light to the Western parts of Christendom. It must therefore be admitted, that granting the pretended efficacy or significancy of Comets they are as often of wholesome as malign influence.

§ 25.

Wherefore to bring all to a close issue. We have already three or four and twenty general heads of the significations affixt to Comets, some most contrary one to the other. Now for their actual operating by any one of these, our Comet-Diviners will not oblige their Predictions to such a strict period of time as a year or two; but tell us, that of all Portents, Comets operate the slowest; so that, if you'll believe them, the effects of a Comet may fall ten or a dozen years after the Comets disappearance. Nor will they confine these effects to any particular persons, or places; Comets may operate where-ever they are seen, and this is usually half the World

World over. Add hereto the frequency of their Apparitions, sometimes each year one for three, four, or five years together (as may be seen in divers places of the Table of Comets) sometimes two, three, or four in one year, so that taking one with another (according to the accounts which we have of years, within our own memory, there is seldom if ever five years without one) and then at what a wild rate must Comets predict, if they do predict any thing; Lastly, consider the nature and constitution of these Events, which are such, so ordinary, I had almost said so necessary, at least so sure to come to pass somewhere or other within such compass of time and place, as demanded for the Sphere of Activity in this case, and may not any man alive, without regard to Comets, certainly foretel some of these will surely within such limits befall? Was there ever Lottery in which the Undertakers desired a Tenth part of so many Blanks to secure themselves?

First, Upon the Variety of Effects we have at least three and twenty Chances of general Heads, most of which might easily be subdivided and branched out.

Secondly, The compass of years (suppose ten, nay suppose but five) bravely multiplies these chances.

Thirdly, The extent of Countries (perhaps a third, perhaps but a fourth part of the World) admirably mends the matter.

Fourthly, The frequency of Comets yet inhances the likelihood, I might say Infallibility, of some of these lucky or unlucky hits; and either of them according, to the *liberty of Prophecy* demanded, will serve to verify the Prediction, at least the Hypothesis.

Lastly, When we throw into the account the uncertainty of Humane Affairs, of Winds and Weathers, the necessary mortality of all Individuals here below, and so the Changes of Governments, the Revolutions of States,

the Mortality of Families, Cities, Empires as well as Men, the different humours of Princes, and a thousand such things, it is scarce possible within such a scope any man that will take upon him to foretel any thing should, even without Comets, prove a False Prophet.

Now if these People shall complain I have wronged them in this vast amplitude, which I say they challenge for Comets signification, I appeal to any of their Books. To take the strictest Rule that I know was ever prefixt, and to make that stricter too than perhaps any of them will be content to admit.

§ 26.

I'll suppose a Comet may operate in any Country, to which it has been Vertical, or near whose Zenith it hath passed visible; and that within a year or two of its first appearance. I fear our Astrologers will be loth to be ever thus confined; but I desire no greater advantage to shew the emptiness and ridiculous uncertainty of their pretensions.

I say then in particular, The famous Comet of 1618 was successively vertical over *Arabia, Persia, Turkey, Barbary, China, Spain, France, Italy, Germany, Poland, Muscovy*, and much further. There's none of these but has many Principalities and subordinate Governments or Dominions under them. *Italy*, which is certainly the least in extent, has in it the Kingdom of *Naples*, the Papacy, the Republick of *Venice*, (where yet there's a Duke), the Dukedoms of *Florence, Millain, Mantua, Urbine*, the Principality of *Parma*, and the States of *Genoa* and of *Luca*, ten considerable Principalities. Make but the like number of subdivisions for every of the rest, and the number of Principalities will be 110. And to which of all these must that Comet have portended anything, or What? suppose a man should publish to the World a Prophecy at a venture to this effect: Of 110 Princes (which there are supposed within *Arabia, Persia, Turkey, Barbary,*

Thom. Finnis  
de Comet.  
1618.

*Barbary, China*, and so in *Europe*) within this year or two one shall die, and a new one shall be born or succeed; or within this tract of the Earth some Epidemick Sickness and great Mortality shall break out: Or some of these 110 Governments as to its form shall be altered, some of these Princes shall invade one anothers Territories, and there shall be one or more dreadful Battles and much Blood spilt, Cities sackt, or otherwise casually burnt (an hundred more accidents may be reckoned up, and any one of them signal enough to be *ex post facto*, reputed the effect of a Comet, according to the usual procedure in this doctrine.) Must not such Persons necessarily speak truth, unless the Great God of Heaven, on purpose to cross the Prediction, should alter the course of Nature.

Again, 'Tis evident by the Table of Comets not only that two, or three, or four Comets have appeared sometimes in one year, but that for diverse years together, still one in each year. As 1537, 1538, 1539, in each one. In the years 1543, 44, 45, likewise so in 1556, 57, 58. More than so A.D. 1400, 1401, 2, 3, four years successively, one A.D. 1529, and so forwards for five years together each one. Now let any man consult Histories, and what shall he find more extraordinary about these times, than about others? In the fifteenth Century were forty odd Comets, above double the number to what have fallen in any other Century. What great Empire risen or fallen since those days?

Once more, From 1618 to 1652, no Comet can we find any where, none appeared in all *Europe* saith *Ricciolus*, and then sure none in these three Kingdoms: yet good God! What Revolutions within those years? For the number of years, can all our Chronicles parallel them? Especially the Twenty last of them, in which term notwithstanding no Comets operation could inter-



pose; for that there had none appeared for about fourteen years before.

Behold then the certainty of Comets portending future Calamities, to which so much Experience, History, and Philosophy in all ages is alledged to suffragate. There are certain publick Evils, Changes, or Vicissitudes, which within a few years (one or two perhaps) will surely befall somewhere or other, as all mankind knows; a Comet appears, which of these Evils or Alterations, where, or at what particular time shall befall, we cannot from this Comet tell before the Event discovers: but some, somewhere, and within a few years, we are sure by the Comet will befall. And when any such thing is fallen out, then we can say (that is imagin, and afterwards affirm without reason) this is the effect of the Comet. As *Spondanus* very soberly, touching the famous Comet in 1618. *Quid portenderit, tempora demonstrarunt demonstrabuntq; cum non nisi ex eventibus de his rebus judicetur.* Admirable Signes and Monitories indeed! which can never be understood till the mischief has taken effect, that is, till it is too late to avoid it.

*In Anclario ad  
Baron.*

§ 28.

I know but one Plea more which either is or can be made for the better ascertaining the Significations of Comets; and that I do not think worth the labour to expose, it sufficiently exposing it self. Its Authors have been pleased to name it Reading Comets. All Reading, say they, presupposeth some Visible Signe, either by Letters, or known Characters, or by Hieroglyphicks, or lastly by Signes. Letters are as known as Alphabets. Hieroglyphicks do represent things obscurely; as for Example, a Battel by a Sword: but Signes clearly and plainly, as namely one Battel by another or by its plain Picture. Now the figures of Comets, say they, are Mystical Characters or as it were Hieroglyphicks, by which we may be able to read by Analogy what evil or good Accident shall

*Gaffarell.  
Unheard of  
Curiosities.  
Part. 4. c. 12.*



shall beset us. Divers Rules to this purpose have been devised by these *Cosmocriticks* (as they delight to be called) the insinuating of a few whereof will suffice any reasonable man; and satisfy him touching all. If a Comet appear in likeness of a Pyramid, it denotes [*Ignis prædominia, & ex Analogia tyrannidem in Republica.*] the prevalence of Fire, for Flame ascends in a Pyramid. (Yet these Comets in England, before the dreadfulllest Fire ever seen there, were neither of them Pyramidical) and by Analogie Tyranny in the Commonwealth: for that we'll suppose is as merciless as Fire. But whether its proper or Analogical signification shall take effect, or when or where either, that we are yet to seek. Again, A Comet in the figure of a Pillar denotes the constancy of some Prince, or some Great Saint, or of some People or Nation. One waxed or dissipated in the form of Waters, signifies Seditions in the People according to the vision of the Prophet, *Aquæ multæ populi multi.* If in the figure of a Sword, it portends War and Bloodshed. If round and clear, the Birth of some Great Prince, &c. I still demand what can be more uncertain and fantastical than this stuff? For my own part I shall never envy *Cornelius Gemma* the honour which he assumes to himself, of being the Inventer of this famous *Cosmocritical Art*: but conclude, upon the whole, If these and the other aforementioned are all the certainties we are to expect from Comets, as indeed they are, and yet Comets must be held Signes of things future and instant, then First, they are at best most frivolous Signes; for they foreshew nothing but general Truths, which were before known to the Reason of Mankind, and so they needed no Signe nor Presage thereof. Secondly they are most useless Signes; for they are so ambiguous, general and boundless, that we can no more gather beforehand any determinate Event from them; than we can know Gods Secret Will without his revealing

*Cornel. Gemma  
De nat. Divin.  
charact. l. 1.  
c. 6. & Gassara-  
rel. Ubi sup.*

ing it. Thirdly, they are *fallacious* Signes and most dangerous to be meddled with: for if we go about by conjectures to determine their generality and interpret them of some particular Thing, Person, Time, Place, &c. is so great variety as they commonly admit, 'tis above an hundred to one but we err, and such Errors may be as desperate as those of War, we may never have the Opportunity to our twice. Lastly, they are therefore most *Ridiculous* Signes; as being before the Event, both needless, useless, and fallacious, and after the Event much more such, and most fantastical besides. We indeed have interpreted (that is fained) this or that to be the Event of them, but take away fause, and it can never be proved they signified what we imagine. *Many Comets* (saith the Learned Scaliger; *have I lived to see, which brought no mischief at all to Mortals any where in Europe: and many Famous Men have died, many Principalities been ruined, many Great Families extinct without any Comet to presage such thing.*

*Ubi sup.*

Now he who has no more reverence for the Wisdom, Grace, Veracity and Holiness of God, than to think, such signs of these are or were of his Intendment, that he would be the Author of what is frivolous and needless, useless and uncertain, fallacious and dangerous, ridiculous and fantastical, much more that he should design and employ things of this nature for our Admonitions and summoning to Repentance, he, I say, who shall think this, deserves to be given up to *believe a Lye*, But I hope no good Christian will believe him, or be of his mind. I conclude therefore, Comets have no significancy either Natural or by Divine appointment, and therefore, in fine, none at all.

§ 30.

As to the reputed Comet, which appeared in form of a flaming Sword over *Jerusalem*, I deny that to have been an ordinary Comet: it had not the motion of a Comet,

Comet, for it stood still over the City for the whole year, nor was it in the Orb of a Comet, but in the lower Region of the Air, being closely vertical to the City, and not seen in other Countries; nor can we learn it had the parts of a Comet, an Head and Train: but it was an extraordinary sign set by God in the Air (whether by some Angel so appearing as of old at the entrance of Paradise, or some preternatural fire enkindled and miraculously maintained there, or otherwise) and its signification, time, place of taking effect, &c. was wholly before specified, as will appear to any, who will read and consider *Luke xxi. 9, 10, 11, 12.* the Order of Events, which signs should forego the Destruction of Jerusalem and the Temple, was this: *Before all these things* (v. 12. that is) first of all the Apostles should be persecuted, imprisoned, conven'd, &c. then should they *hear of Wars and rumours of Wars* but the end *is not by and by* v. 9. Afterwards should be *Earthquakes in diverse places, and Famines and Pestilences*: and then *terrible fights and great signs* should there be *from Heaven* v. 11. And they who shall read the Historian, who relates what befel (by way of fulfilling this Prediction) may find, that this of the flaming Sword (reputed a Comet) was but one of those fearful fights or great signs. *There appeared before the Sun* *Iron Chariots, and armed Bands in arrays traversing the Clouds and encompassing the City.* *in compliance with which we read, v. 20. When ye shall see Jerusalem compassed with Armies, then know that the Desolation of it is nigh. Then let them which are in Judea flee into the mountains, &c.* The City was twice encompassed with Armies, first in the Representation in the Sky, then in reality, when besieged by the Roman Armies. Of all the seven Prodigies he reckons up, there are only these two mentioned, which can be accounted, *Terroures and great Signs from Heaven*; and more.

*Joseph. de Bello  
Judaico. l. 7. c. 12.*

more than one such sign there ought to be to verify the Prophecy. So that in short, 'tis plain that all, who then in *Jerusalem* knew of and believed our Lords Predictions of the Signs, which should forego the sacking and final overthrow of the City and Temple, understood full well when these Signs appeared, that it was *nigh even at the door*. This therefore has nothing to do with the significancy of ordinary Comets: but if still any will pretend it has, let them shew us the like expresse Scripture determining thus the signification of them.

§ 31.

Having discoursed thus copiously the Vanity of the Pretence which makes Comets in general such Ostents, and so dreadfully influential, 'tis in a manner wholly unnecessary to say any thing of this present Comet. If none be of so direful consequence neither can this. But lest this should be thought, by some timid Spirits, almost as extraordinary as that over *Jerusalem* (though I have, as far as concerned the first Head, amply obviated this surmise already) I shall in a word or two, for more cumulative satisfaction, produce those very Rules, by which our soberest and most learned Meteorological Prophets proceed in their Judgments touching the Malignancy of Comets, and it will appear that if those Rules be applied to this, they render it as little formidable as any. *Forma ut horribilis, &c.* By how much the more dreadful the shape of any Comet is, by so much the greater the Evils it threatens. I have said and will stand to it, no Comet can appear in a more natural shape than this does: and a plain Diagram representing its shape and position to the Sun, would easily demonstrate it. But

*Cardan. de rer.  
variet. l. 14.  
c. 70.*

To proceed with their Rules. *The colour too, if Red and Fiery* (as by the Table it appears the most of those, whose complexions we have account of, have been) *or blewish and inclining to black, may raise Fears: for these are the*

the worst of all. But those of a fair silver bright colour [as was this when seen clearly] are less to be dreaded. Those also, which are of so great duration, and which come thick together, or which are of vast great bodies are more dangerous, and those in the day time rather than them in night. All these Characters acquit ours. Again if we should judge it from neighbouring Planets, at its first appearance with us 'twas in the same Sign with the Sun, though much nearer Venus than to him: the influence of neither of these should seem malign. But indeed these notions are (*monstra Fabularum* as Bodinus truly terms them) the greatest Prodigies of Folly. For my own part, I judge those which appear the lowest of all (if there are any such of continuance, which may not be reputed extraordinary Works of God) to be the most dangerous: for those in all probability are gross Exhalations and are likely therefore to be noxious. But I am well assured this is high enough (I no whit doubt above the Moon) and sufficiently remote from the Earth to have any influence upon our Atmosphere, and much less upon our Bodies.

I shall only add, it has never been nor I presume will be vertical to us by at least 20 Degrees or upwards. There is no more cause then to believe our selves concerned in it than Italy, Spain, Portugal, Germany, and the Low Countries: not so much as the Americans of Peru, Amazonia, Guiana, Nova Andalusia, Terra Firma, Cuba, &c. or the Africans of Morocco and the greatest part of Barbary, near all whom it past vertically. Of all the Territories subject to our Sovereign, it was most nearly over Tangier, the taking of which by the Portuguese about the year 1472, was reckoned as the effect of the Comet preceding. Now suppose a man using the stile of the Star-Prophets should say I am afraid how it will fare with Tangier, this were a mighty Prediction; yet who might not have said as much with great reason long enough before the Comet? Or because it was seen at Rome in the beginning of November, and in Flanders about the middle, if some

should say *Rome* is threatned by some potent Enemy, *Flanders* is in great danger, to Fools perhaps he might seem to divine by the Comet, but whether ever Comet had shone or no, he might say these things with great reason or truth, and yet perhaps neither *Rome* nor *Flanders* suffer. And 'tis plain such stuff as this is the usual language of our Prognosticators. But still upon the whole, our share must be last, and, because remoter from it, in all probability least. We will then thus dismiss any pretended signification of Comets in general or particularly of this.

§ 32.

It will now be demanded if the foreshewing of Judgments or Calamities be not the end of Comets, for what do they serve? Without some end or design certainly they are not.

In return hereto I will endeavour a brief account what moral influence Comets ought to have on us: for that they could be intended (as the case of Mankind now stands) for no such Signes and Monitories as commonly thought, I presume already evident enough.

I judg therefore they serve for the same purpose, as do the greatest number of the other Stars, (to which (as before said) till I have greater likelihood than has yet been produced to the contrary, I must needs conceive them near a kin;) namely, to beget in us a deeper belief and admiration of the great God of Heaven and Earth; to convince us of his Infinite Power, Wisdom and Majesty, and to bring us all to fall down before him, and with adorations to acknowledge, that *His ways are in a great deep, and his works past finding out.*

The hiding pride from Man (when he had made him Man) was, I had almost said, a difficult work to the Almighty God; not that Man understands all the visible works of God, but that he thinks he does: And perhaps he is bolder with the Heavens than with the Earth. He has divided them by Circles, and mered those out by Degrees. He has as it were placed in them his Landmarks, and set them out into portions, and then proudly assigned to all the Heavenly

Host



Host the laws and bounds of their motions. And though the most High God seems to have reserved it as a peculiar to himself, that he *telleth the number of the Stars, and calleth them all by their names*, yet the Worm man has presumed to call them by names of his own imposition, and not to allow any to appear without his cognisance, and then too in such Phases and Configurations, as he pretends to have long observed. But the wisest have acknowledged themselves much at a loss in the Theory of Comets: (For I conceive the Peripateticks scarce in any thing ever so much exposed themselves, as in their positive Doctrine herein; all sorts departing so much the further from them, by how much the more narrowly they search into the Question.) These I say have been generally acknowledged to surpass our comprehensions and laws. *Res perplexissima est, & omnem fere conatum eludit*, saith *Fromundus*. And whatever some have pleased themselves with of late, yet admitting that from the first appearance and setting out of a Comet we could be able to foretel its motion, and calculate Ephemerides (as some have pretended) there are so many other Questions which remain, not to be defined with any certainty, that we must conclude these *Phænomena*, the Miracles of Nature, as one truly calls them, and [*idonea ingeniis nostris torquendis, &c.*] *fit to puzzle curious wits, which we must admire, but shall not be able to fathom*. They generally partake so much of a Planetary motion, that we cannot believe any of them (which are truly Comets) much below the Planetary Orbs; and if our ordinary measures fail us not, many of them have been above, not only divers of the Planets, but amongst the fixed Stars. When they shall become visible to us we cannot account or foresee, nor in what fashion. When they shall disappear too, is almost as uncertain at first: and when they do disappear, we know they go not out, as has been thought by some, like Lamps for want of Oyl: (*Non extinguuntur, sed excedunt*, was anciently and truly said of them) they still move higher and higher, till they get out of our sight, or else plunging them-

*Meteorolog.*  
L3. c. 2. art. 7.

*Philos. Transa.*  
act. N. 1, 3.  
&c.

*Fieri de Comet.*

*Seneca.*



selves into the Sun-beams become (as to us) absorpt. As therefore we are from hence and other grounds sure they are no exhalations, so though we cannot rank them amongst the ordinary Planets, yet neither can we conceive them fixt Stars. Centres their course and Orbs have, which in probability we know not where to place, and after all our disquisitions, 'tis most likely the issue will be only a proof, that they are we know not what, but beyond our reach. Thus having traced them till we are lost in infinite heights, we shall in the end perhaps, whether we will or no, acknowledge Infinity, and fall down and worship the Incomprehensible God, who hath made Heaven and Earth, and all the Hosts of them. This is one use I would make of Comets, and who makes this will never account them frustraneous or frivolous.

§ 33.

But besides, there are a sort of men not so thoughtful, yet much wilder in their pride than those forementioned. These trouble themselves no more with contemplating the course of nature than brute beasts. They observe day and night succeed each other: Summer and Winter, Spring and Harvest come in their seasons: Animals are brought forth and live till they die, and still there is a new succession of others of the same kind: so it has been ever since they knew the world, and so they think it ever will be, nor anything do they mind further than the present state. When therefore we talk to them of Religion, and in the end are inforced to assert Christianity, from the Miracles by which God avouch'd it, they'l tell you, could they see any miracles, yea any thing that looked beyond the ordinary course of nature, they would have more credit for the pretensions of Religion. We say (perhaps what is a great truth) there can be no Miracle so great, as is the whole frame and course of Nature; yet this they admire not, because it every day incurs into their eye: Now the All-wise God may seem to have left himself these reserves (these little occasional emergencies, and much unaccountable rarities of Nature) to give in all generations fresh witness of his Almighty Being, Power  
and

and Godhead. If what is always in our eyes be not wonderful because familiar, that which is rarer may challenge to be so: and though the greatness and glory of the one do not persuade, the novelty and (to vulgar apprehensions) dreadfulness and prodigiousness of the other may move some minds to admire: And admiration (naturally begetting consideration) may operate to seriousness and thoughtfulness of God and themselves. All which being backt by other happily conspiring providences and counsels, may end in a blessed conviction and change. If any say, they seldom obtain this effect, I answer, the more's the pity; that they are apt and properly enough subservient thereto cannot be denied: but they may perhaps affect more than we know of. And besides, if it should be but one or two persons in an age that should be struck into seriousness by such appearances, I believe it amply worth the cost of a Comet. For I can never approve that conceit of a man, *Cassand. Med.* in other things generally excellent, that 'twas Humane Vanity <sup>1607.</sup> and Pride, men thinking themselves worthy, for whose sake such Ostents should appear, which first induc'd the opinions of Comets significancy: If God thought fit to give his Son for us, 'tis no pride to think we are worthy of Comets.

Nor do I conceive it any other than a laudable use of them, even to the best and most vertuous, to employ them as occasional motives to new Devotions, and the exercise of divers Christian Graces: hereto no Novelty can be improper. Those remnants of vain and superstitious fears, which in spite of discipline stick too deep in our minds, are happily overcome, I had almost said sanctified, when they only lead us to lift up our hearts to God, and exert acts of Humility, Faith, Resignation and adhesion. To take an instance or two. A man has by night an odd dream, which runs much in his head a day or two after; or the head of his Staff falls off, when he suspects it not, and can give no account of it; or, his Picture hanging in a room, where none come to disturb it, falls down upon the face, and is broken or blemisht: The memory of these cr.  
the

the like accidents, haunts his thoughts (though he reject or check the suggestions) with divers sinister forecasts. Now, I say, if hereupon such persons Soul retire secretly within its self, with such acknowledgment and devotion as this [*Lord, I deserve worse, than these Omens or my own timidity thereupon can suggest: but I have committed myself and my concerns to thy Grace and faithfulness, and I do again commit all to thee and on thee depend. Devote all evil, if it be thy blessed Will; and if not give me due temper for it when it comes. Let me not fall from thee, nor miss of my portion in thee however.*] If I say fully fears themselves only occasion such practice as this, I think they are of wholesome effect: for certainly without them, this is our daily duty & interest, and when they are thus mastered, they cannot be any mans sin, however otherwise his infirmity or infelicity.

*Plain, in vna  
Calisti.*

It is reported of Pope *Calistus* in the year 1456, wherein two Comets appear'd, that he affrighted at them, appointed publick Litanies and Supplications diverse days for deprecating the wrath of God: and caused the Bells to be tolled at noon day to call people to their prayers against the growing power of the *Turk*. And *Ludovicus Pius* beholding the Comet of 837, reflected so seriously upon death, that he set his house in order, caused his Son *Charles* to be Crowned King of *Neustria*, settled the Succession and spent his time in preparing for another world. *Charles* the Fifth beholding another in his days, *His, ait, judiciis me mea fata vocant*, lookt upon it as a remembrancer of his death. To lay any such imagination so to heart, as to be disquieted thereby or incapacitated or indisposed for our business I account sinful: But upon any account whatsoever, to mind our mortality and prepare for our end, or to reflect upon our own or the publick crimes, which may call down Gods vengeance upon us and to implore his mercy and forbearance, will be far enough from blameworthy. If therefore, notwithstanding the foregoing discourse, the present Comet seem to any to portend some imminent Judgment, nor can the conceit thereof be rooted out, let them

them make use of it thus as a Monitory to such holy affection and practice as suggested. 'Twill be but an improving irrational fears to an holy purpose. Yea if not only particular persons, but all the Nations which beheld it, should make such use of it as the *Ninevites* did of *Jonah's* preaching, I know not who would reprehend, or censure them of weakness? 'Tis sure, the age has need enough of repentance; and without a Comet, we want not notices abundant, that if we do not repent we cannot long escape the signal vengeance of God.

In the mean while, as to this and all like appearances in the Heavens, I must prophesy it ingenuously as my thoughts, they are more to be admired than dreaded. In sum, They serve to repress and confute the conceits of a little Omnipency vain man pretends to in Naturals, or in fathoming the works of God. They may conduce to stop the mouths of some grosser sort of Atheists, or make vain and inconsiderate people capable of serious thought, which thought pursued may be happy to them in the end.

They may and (as all uncouth and new occurrences) ought to be made occasional advantages of Devotion and fresh re-signation of our selves to Gods disposal: And these are the best influences Comets can have on the World. But the making use of them, thereby to read the Destinies of Kings, Nations or Governments, is irrational, fantastical and heathenish, unbecoming either a Man or a Christian. And so instead of any dire presages, The blessing of the Almighty be upon the whole *Israel* of God.

#### AN ADVERTISEMENT

Touching the Table of Comets, pag. 3; &c.

Since my finishing this Table, I found I have only attempted therein to do what was better done before, a much perfecter than even I can pretend to collect, being extant above a dozen years ago in *Hévelius's* *Cometography*: mention of which I too late met with in the account given of that Book *Philosophic. Transact. N. 40.* But the Book it self I have not seen, nor can I hear

535.

# ADVERTISEMENT.

it is to be seen in these parts. What I have done was done upon the sudden, and by a man who never made Astronomy his business, as I fear it will too much appear. Wherefore I am content to come far behind Hevelius herein, and to have thirty fewer Comets in my Table than they say he has in his. But I could have increased my numbers, had I not allowed for the Variation of Chronologists. Amongst these, 'tis ordinary for one to postpone the same Events two or three years to the account of another: And so it had been easy to have multiplied Comets, reckoning the self-same Comet two or three times over, according as different Accounts place it in different years. This I have avoided, and rather put an Alias, as in A. D. 71, and 77: &c. than be guilty of double reckonings: so that I can with good confidence say I have not over-bergerd the Table.

But at the same time I must be just to Men, as well as to the Heavens, and acknowledge from whom I had the main-body of my Collection of Comets, namely from Abraham Rockenbach, J. U. D. and Professor sometimes of Mathematicks in the University of Frackfort. I have in this case only drawn one part of his Book of Comets into a Table, and made such additions to it as I could. And I desire the Reader to take notice, where I have vouch'd no Authority in the Table, I depend on Rockenbach's authority, or the Writers he produces: where other authority is alledged, those things are somewhat of my own poor additional Stock.

I could have made much more use of my Table than I have done, but I had a strict eye to my design, and would not for the present concern my self to apply it farther: and, having confess'd my self so vain as to think I have by it amply proved what I designed, I think 'tis use enough of it for once.

I might add somewhat also touching the second Table, pag. 43, 44, as to the strange variations of Learned mens judgments touching the same Comets: But this being as extravagant as mens fancies, I waive it. One shall account that Comet Martial, which another avows Jovial, and thence strangely differs in his presages, and afterwards as much in his Historical applications. But it is sufficient to justify my receding from such, that being witnesses to the same things they differ among themselves; and in all likelihood, as I have often observed it in the Weather Prognosticators, the truth commonly lyes on none of the Positive sides, but as neer as may be in opposition to them all, and that will be, in the present case, with me.

The E N D.



## The STATIONER to the READER.

**I** Am to assure you, good Reader, that the Author of this Discourse was very much surpris'd when it came to him from me by a Letter in print; as thinking it had been long ago laid asleep or forgotten, as he judg'd it to deserve. He has therefore required me to acquaint the World, *Bonâ Fide*, that he wrote it at the time specified § 16; namely before the Comet with us was fully a Calendar Month old: That the sole Occasion of his writing of it was the strange consternations of many People at that time. We were then all here full of Apprehensions touching an Irish Plot, or second Massacre of Protestants; And when the Comet appear'd amidst those thoughts, diverse people, in that part of the Country, where the Author then happened to be, were so strangely struck, that their Faces were grown almost like the Comet, only of a blacker pale. In some places several Families would get together in one house by night, and a certain number watch while the rest slept. Nay there were not wanting some, otherwise discreet persons and of real Religion, who came from their own houses to stay a while with such Friends of theirs, whom they had better thoughts of than of themselves, not so much to receive their Advice, as to *Dy with them*. Upon hearing such occurrences as these, the Author committed to writing, what he commonly talked for his Friends satisfaction. This may qualify some expressions in the Book, which now look odd, but were then reasonable enough. What is now presented would have been much more mature, and clearly another thing, had it been design'd to have been publish'd at this time, or been indeed any other than an Hasty Essay. Being thus, and on such occasion, writ, a Copy of it was sent to those Excellent Ladies before named, only with an intent to entertain them privately with Reason & Truth, while the World entertain'd themselves with Fables, Wonders or Fears. From that Copy fallen into my hands, it now, without the Authors knowledge, be-

## *The Stationer to the Reader.*

came publick; somewhat unseasonably, because so long after it was writ, and after the Comet has disappear'd.

One thing which he would willingly have added to it (were it worth the labour, or not too late) is some Illustration of the Notion and Genesis of Comets § 17 and 18, and that in a Scheme or two. In stead of which, he has thought fit at present to send me only a piece of one, which I have here sub-joined and may serve to clear § 17 and the first Paragraph of § 31. The straitness of the page is such, that no proportion of the Sun to the Earth or of the distance of the Orbs, could be observed. But I have obeyed the Authour in this, as I could.

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### *Explication of the Scheme.*

**T**HE Orbs appear by their names, of *Fixed Stars, Saturn, Jupiter, &c.*

The Pointed Circles are Orbs of those *Latent* or not appearing *Stars*, which may be *Comets* when in due position to the Sun.

The Figures 1, 2, 3, 4, &c. such *Cometical Stars* not appearing.

Let the Line A B. be understood the *Horizon*.

C. the *Present Comet*.

D. the *Surface* of the *Earth*, where we dwell.

E. the *Earths Centre*.

F G. the Sign of *Capricorn*, or that part of the Heaven in which the Sun and Comet then were.

T. any great fixed Star.      Z. our *Zenith*.

The use of the other Letters will presently appear.

Now I say,

1. The Sun being suppos'd about 15 degr. below the *Horizon*, and the *Cometical Star* (which is accounted of a pellucid substance and exemplified by a Glas Globe filled with Water, § 17) five or six degr. above it, this Star shall receive and reflect light from the Sun, and be visible to the Eye at D. And  
because



### *The Stationer to the Reader.*

because the Hemisphere above the Horizon is, by reason of the Suns departure, dark, therefore, the Raies, which fall upon the Body C and penetrate it, shall appear visible to us in that part of the Atmosphere of the Cometical Star which is above it: that is, there will be the Luminous track CH, the train of the Comet.

2. The Cometical Stars, Number 1, 2, 3, 4, 5, shall not be seen, though they all now should be supposed in being in their Orbs, because all absorpt in the Suns light. Nor shall that Number 6 appear, because supposed for the present moving in conjunction with *Jupiter*: nor that Number 7, because moving in conjunction with T some fixt Star of Eminent Magnitude. Nor, lastly, shall those Numbers 8, 9, and perhaps diverse others, which may be supposed towards those parts between Z A, be visible, because, as to some, the shade of the Earth interposes, and, as to others, the Sun is at too great a distance, and its Raies too faint, to illuminate them.

3. I say the Train of the Comet CH cannot appear in a more natural Shape and Position; as affirmed § 31.

4. Because the Parallax of the Comet, viz. the Arch KI, is less than the Parallax of the Moon, viz. LM. therefore the Comet is above the Moon.

5. That the farther the Comet by its proper motion (moving from C, whether towards N, or towards O, or towards Q) the further I say it gets off from the Sun, the higher it will either appear, or be, to us, and the less its light.

All these things fall out naturally and easily according to this Hypothesis. Much more use could I make of this Scheme, but this is enough for the purpose of these Papers.

The greatest objections which I can foresee against this Doctrine are, that, according to it, Comets must needs be more frequently Visible, and their Motions more Regular and Accountable. To which many things might be returned; but I will only say, I suppose these *Cometical Stars* to move ordinarily very near in conjunction with some *Great Star* or

## The Stationer to the Reader.

*Planet* of their neighbouring Orb respectively, and by this means to be generally drown'd in their light: But yet there being some *variation* in their Motion (of which no good account can be given, because they are so seldom *seen*) by reason of this variation, after some period of years, they are *left behind* the *Principal Stars*, and then, if *duely posited* to the Sun (and not otherwise) they *become visible*.

But what, if after all they should have *other Centres* than the *Earth*, as is suggested pag. 25. l. 10? such as the pointed Arches O P or Q R. Then they may appear seldomer and perhaps move more irregularly then we can prove they do. And might I be admitted instead of the old *Ptolemaick* systeme to use the *Copernican*, a great variety in these points would appear easie and natural, nor any *Phænomena* of Comets, which I have heard of, not solvable upon the whole.

This may satisfie Persons no more learned in the Stars than my self; And as to those who really do better understand that heavenly Science, I am confident they are either already satisfied in their own better notions; or otherwise above vulgar Amusement and Consternations; the honest removal whereof was all the design of these at first *Hasty*, however now so *Late*, Papers.

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## ERRATA.

P Ag. 1. l. 9. r. Cheatees. p. 9. l. penult. r. Astronomi. p. 16. l. 11. after 40 Degrees put a Comma. l. 22. for Herelius r. Hevelius. p. 17. l. 28. for bad, r. Had. p. 19. l. 2. r. Longo. p. 27. l. 4. for left r. less. p. 29. l. 9. r. came. p. 31. l. 8. r. of Mars. p. 35. l. 13. r. customs of the People. p. 36. l. 30. r. in fine. p. 40. l. 10. dele. of p. 43. l. 22. put a full stop after one. p. 45. l. 8. r. those Comets. p. 46. l. 22. r. as these. p. 47. l. 12. r. the Order of Events, which as signes. p. 50. l. 33. r. Meted. p. 54. l. 25. r. Indiciis. p. ult. for p. 43, 44. r. 38, 39.